

The
HEALTH
of the **CHILD**
BY NATURAL METHODS

By DR. PHILIP M. LOVELL

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DR. PHILIP M. LOVELL

DRUGLESS PRACTITIONER

*Editor of the Most Widely Read Health Column in the World,
"Care of the Body" Department of the Los Angeles Times*

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B A B Y

"THE sleep that flits on baby's eyes—does anybody know from where it comes? Yes, there is a rumour that it has its dwelling where, in the fairy village among shadows of the forest dimly lit with glow-worms, there hang two timid buds of enchantment. From there it comes to kiss baby's eyes.

"The smile that flickers on baby's lips when he sleeps—does anybody know where it was born? Yes, there is a rumour that a young pale beam of crescent moon touched the edge of a vanishing autumn cloud, and there the smile was first born in the dream of a dew-washed morning—the smile that flickers on baby's lips when he sleeps.

"The sweet, soft freshness that blooms on baby's limbs—does anybody know where it was hidden so long? Yes, when the mother was a young girl it lay pervading her heart in tender and silent mystery of love—the sweet, soft freshness that has bloomed on baby's limbs."—*From "Gitanjali," by Tagore.*

FOREWORD

More than at any other time, people are beginning to think of health in terms of Natural Methods. The day when the doctor wrote a prescription for every ailment is gone.

Men and women are beginning to wonder as to the why and wherefore of disease. Slowly the truth is beginning to dawn that all disease is a sequence of the crimes we commit against an over-lenient Nature.

The public is rebelling against the constant drugging and serumizing, against the promiscuous, haphazard, ever-ready use of the surgeon's knife.

An ever-increasing knowledge is making us aware that health must be sought in the domain of diet as well as in the domain of physical and mental hygiene. With it comes the belief that Natural Methods can efficiently treat every disease of infancy, childhood and adults with none of the disastrous after-effects that characterize drug-therapy.

This book is an answer to a crying need. Many volumes on Natural Methods in the treatment of disease and the maintenance of the health of adults have been written, but, to my knowledge, none have been devoted to the health welfare of the child exclusively.

As a practical practitioner of the healing arts, I have attempted to cover as exhaustively as possible (especially those problems that confront the great majority of mothers) the common ailments and the most prevalent diseases of children.

Many of the chapters have been taken from the "Care of the Body Department" in the Los Angeles Times, which I have conducted for the past few years.

Foreword

The health section of *The Times* is unique. Not only is it the largest health department of any newspaper in the country, but undoubtedly it is the most extensively read. People from the four corners of the earth get *The Times* exclusively for this single feature.

It is the pioneer health section of any newspaper in this country, being almost thirty years old. It is not only the most popular but also the only newspaper health column advocating drugless-therapy.

The "Care of the Baby" portion of this health column has proved itself to be the most popular of all as evidenced by the many thousands of letters received. It is largely through these letters that I came to recognize the tremendous need for a distinct book on the health welfare of the child, treated exclusively by natural methods.

I have made it a special point to avoid highly involved, technical phraseology and to make it as plain as possible to the layman.

It is intended to be a book exclusively for parents and for nurses to enable them to handle the many health problems that arise in the bringing-up of a child.

With the hope that it will contribute toward making this world a better place in which to live and that it will help to free our children from the many vices and diseases which characterize our civilized life of today, I dedicate this book to mothers of the world and to those who serve childhood.

THE AUTHOR.

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PART I
GENERAL INSTRUCTIONS

The HEALTH OF THE CHILD

CHAPTER I PARENTHOOD

An important factor in the development and care of the human body is to keep it not only free from disease, but also beautiful; the beauty of which we dream, the perfection of form, the harmony, the wonderful figure of grace, symmetry, and liness, the perfect functioning, free from pain or distress, the living simplicity of life which so many of us hope to attain—the body beautiful, the strong body, the virile body!

This is perhaps the most important problem next to the immediate problem of overcoming disease.

What are the conditions and circumstances necessary to build this ideal body, this perfectly functioning organism? When shall we start? How shall we start? What shall be the principles in beginning?

TRAINING FOR PARENTHOOD SHOULD COMMENCE LONG BEFORE BABY IS CONCEIVED

A certain young woman asked a famous German professor when she should commence to train her child, and he replied in all seriousness, "Twenty-five years before he is born."

We are, first of all, a product of heredity. We are what our parents have been. We are the composite synthesis, the unit of all that has gone before. We are

the organized result of the experiences of the race from time far distant.

Therefore, the training for the healthy body should commence before the child is started. In other words, the problems of parenthood are the first vital problems for us or for society to solve in order to secure the foundation of that healthy body.

As far as training for parenthood is concerned, getting body and mind in physical and mental harmony with health is a thing relatively unknown.

We breed our swine, our cattle, our poultry, all of our domesticated animals, according to the known laws of heredity. Yet everyone of these basic laws of heredity is disregarded by us, excepting as we conform to them unconsciously.

Domesticated animal life seems to be of more importance to us than human life. When we arrive at that stage of intelligence where we can look at the elemental facts of human life with frankness and openness, when we can discuss these facts with the same freedom with which we discuss the physiology of digestion, then, perhaps, the human race will achieve a better mankind and a better childhood.

Any of you, even though you have but a smattering of agricultural knowledge, know that if you want to grow a good head of lettuce you must use a seed that is mature; that an immature seed will grow an immature plant.

Therefore, the quality of the seed determines the kind of child that is brought forth.

NUTRITION GOVERNS EASE OF CHILDBIRTH

What are some of the simple aspects of this problem? How, for instance, does the nutrition of the mother govern the type of embryo as well as the type of child?

Why is it that, with most women, the child-bearing process, which is a perfectly simple and natural process on the part of every animal that lives, becomes a process of abnormality, accompanied with terrible lacerations and agony, so much so that it has been likened to going through the valley of death?

How often do we encounter nine, ten and eleven-pound babies born to tiny little women? When we consider the terrible agony the mother is compelled to undergo in giving birth, the surprising thing is that we have as little mortality as we do.

It is unnecessary to have children weighing nine, ten and eleven pounds, making the birth process unbearably agonizing for the mother.

It is possible, by the process of nutrition, to develop an embryo which will not endanger the life of the mother when she is compelled to give birth.

It is possible to have a child whose bones are soft enough to go through the birth canal easily.

UNNECESSARY ANAESTHETICS ENDANGER BOTH MOTHER AND CHILD

It is unnecessary to resort to the artificial methods so much in vogue today—anaesthetics of one kind or another, the use of which, so frequently, not only endangers the mother, but is, in part, responsible for our high infant mortality.

Have you never wondered why it is that after an operation the surgeon is usually more concerned about the possibility of pneumonia or pleurisy developing than about the after-effects of the operation itself?

We know that the anesthesia of ether or chloroform is produced by the inhalation of these gases into the lungs, and that the consequent nervous depression produces unconsciousness. The lungs are so weakened by the inhalation of these fumes that if the patient is the

least bit exposed she is likely to contract pneumonia or some other respiratory affection.

The child is affected through the mother. Until the moment that the cord is cut the child is still a part of the mother, and the bloodstream going through the mother to the child, polluted and tainted by the effects of the anesthetic, impairs the vitality of her child.

Frequently I show to a prospective mother the high and low forceps so commonly used. As they feel the pressure which is exerted, I ask them, "How would you like to have your tiny unborn baby undergo that terrible pressure on his head with these forceps pressing his bones, bones so soft, so yielding, so flexible and elastic?"

Then we wonder why, five or ten years later, the child is dull—mentally deficient—when his brain has been compressed to the extent frequently done during the abnormalities of the birth process.

We wonder why the child contracts one disease after another, when we have retarded it, even before it was born, because we have poisoned its bloodstream by the use of the anesthetic or other pain killer in the child-birth process.

Therefore, from the very start, from before the child is born, we must lay the foundation for the development of a strong and virile body.

From that time on it becomes a question of purely animal care.

Many of you know that you lose the largest part of a litter of kittens or of puppies if they cannot be fed upon their own mother's milk.

We look at the mortality statistics and find that of every hundred children born today, fourteen will die before the year is out.

Why?

Is there no connection between this and the fact that only forty-five per cent of American mothers nurse their children to the ninth month?

Yet, as I have stated repeatedly in writings and in public lectures, the ability of the mother to nurse her child is a question of preparation, of nutrition.

DIET GOVERNS THE PHYSICAL QUALITY OF THE CHILD THROUGHOUT HIS EARLY YEARS

The next stage of development is the period of childhood, that is, from the age of one to the age of thirteen.

And what do we find, as a rule? We find that the child is permitted to be guilty of every dietetic indiscretion characteristic of adults. The consequence is that he goes through an apprenticeship of disease, which many consider a necessary process of childhood.

You believe, many of you, that measles, scarlet fever, whooping cough, bronchitis, and many more serious diseases are a necessary process of childhood.

On the contrary, there is not a single disease, not even the much-vaunted measles, which is necessary during childhood. Every childhood disease is a means which Nature uses to discharge the putrid effects of our faulty methods of feeding.

If you visit any public school during the recess period and see the popular dietetics applied to our own flesh and blood by people who would not feed their hogs and their chickens such food, you will not wonder that sixty per cent of American children, by the time they have arrived at the age of eighteen, have had the surgeon's knife applied to some part of their anatomy.

CHAPTER II

PRENATAL HEALTH

Every once in a while a prospective mother asks about "the early training of baby."

Baby's training must begin before he is born.

Remember, baby is a mixture of the physical, mental and moral characteristics of his parents. Even though the mother furnishes the nutriment and ingredients for growth and development, yet the physical and mental foundation of baby's future life is distributed half and half between mother and father.

Every breeder of animals knows that there are definite periods in which, if conception takes place, the highest and best type of animal is produced. True, we do not breed like animals, but we can most assuredly respect those laws under which they produce the best of their kind.

There is nothing sordid or animalistic in our respect for those basic precepts and laws of conduct which also govern animal life.

That is, it behooves the parents to be at the highest physical and mental plane before they may hope to conceive the best type of child.

CHILDREN SHOULD NOT BE ACCIDENTS

Children should not be a question of chance. They should be earnestly prayed for and more earnestly prepared for. The noblest function of any individual is procreation. It ill behooves us to enter into this great life task poorly prepared.

As the seed is, thus shall the child be.

If we train ourselves to habits of self discipline, or self control, if we curb our baser instincts, develop our

nobler selves and strive toward a cleaner and a better mental and physical life, we cannot help but produce a child of similar characteristics.

Here and there we occasionally encounter children who are given every possible advantage of upbringing. Their food is perfect. They have mothers of fine intelligence, who well understand the problem of child discipline and training—yet, notwithstanding these exceedingly favorable factors, the children are often sickly, wayward and undisciplined. The only cause to which we can attribute this inferior development, in spite of the favorable environment, is heredity.

It is a sad commentary on our civilization to state that far too many of our children are conceived in lust instead of in love, in ignorance instead of in knowledge and are “accidents” rather than prepared for, consistently and intelligently.

PRENATAL INFLUENCE

Even after baby has been conceived and during his period of development within his mother's womb, much can be done toward building the body healthy and beautiful.

Mother's blood is baby's blood, qualitatively and quantitatively. The blood circulation of the body is established once every thirty seconds. The blood which, a moment ago, was in mother's body now circulates through baby's body. This demonstrates the tremendous importance of a clean bloodstream and of a healthy body.

If, at any period of her life, mother's diet should be carefully chosen, it is during pregnancy. There is no epoch of her existence where she can so ill afford to undergo the toxemias of pregnancy induced by constipation.

She cannot, she must not, she dare not, eat what she pleases, at least, if she values her coming babe.

Even though so many mothers are ill prepared to nurse their babies, the least they can give to their little ones is a clean nutrition derived through a clean blood stream.

Mothers of tomorrow, prepare seriously, earnestly, with all the love of motherhood, for the most sacred of life's function—parenthood!

CHAPTER III

"BLUE" BABIES

Many of you have seen babies who, from birth, seem to have a pale bluish complexion and who seldom become as sturdy as do other babies. They are not necessarily the products of faulty diet nor of poor care. Rather are they the product of "poor birth."

The "bluish" discoloration is due to an abnormality of prenatal development. To understand this you first must know the normal from the abnormal.

The human heart, after birth, consists of four chambers. The two receiving are known as auricles, and the two discharging are known as ventricles. The fetal heart, however, before birth, consists of but three chambers—one auricle and two ventricles.

THE HEART CHANGES AT BIRTH

Immediately after birth the auricle of the heart should divide in two by the formation of a membrane through its center, thus creating two auricles. In some children this membrane fails to form. The result is that the venous or blue blood is mixed with the arterial or red blood. Consequently, the entire blood of the body assumes a darker hue than normal. The result is a "blue" baby.

Now, the question that arises is, "What causes this failure of development?"

Many elements have been held responsible. Premature delivery before the full nine months of gestation, perhaps, leads all other causes. A child born prematurely is usually more handicapped than one permitted his normal prenatal development.

PREMATURE AND UNNATURAL DELIVERIES ARE
MOSTLY RESPONSIBLE FOR "BLUE" BABIES

Not only is premature birth a responsible factor, but so, too, is a forced premature delivery, even though the pregnancy has gone to the full term.

Far too often doctors force Nature. They do not care to wait twenty-four or forty-eight hours for the slow but certain forces of Nature.

Had we more spontaneous births and fewer artificially induced, "blue babies" would be almost unknown.

Together with both the causes just mentioned, we find still another cause playing a vital part in the formation of "blue babies." It is nothing unusual for a woman about to give birth to be "shot full" of morphine half a dozen times or so. It is done under the plea of "humanitarianism"—indeed a very noble motive.

But is that the only thing which concerns us? Do we believe that the blood stream of a mother can be saturated with deadly narcotics without its affecting the infant? The mother's blood and baby's blood are the same.

The effect of a narcotic-saturated bloodstream may also be a very potent factor in preventing the formation of this heart membrane whose absence means the birth of a "blue baby."

Mothers-to-be, steer clear of drugs, not only while carrying baby, but during delivery as well. The chances of giving birth to a "blue baby" are then reduced to a minimum.

CHAPTER IV

NERVOUS INFLUENCES AND HEREDITY

There is scarcely one of you who, at some time or other, has not heard some of the stories told about the influences of prenatal nervous reactions on the child. The tales will vary with the teller, but usually they have one general trend.

You will hear the story of a mother who happened to see a brown bear while she was carrying her baby in pregnancy and the picture that will be given to you will be that the child somewhat resembled the bear after birth.

Again, the story will run that a mother happened to see a monstrous sight; for instance, a person with the cheek heavily gashed and the child was born with a birthmark on its cheek.

These stories will run the gamut of imagination. Most of them depict abnormality or monstrosity coming as the result of a very forceful mental image being placed on the mother's brain while the child was on its way.

The question is: What truth is there in these multitudes of gossipy tales? Have they any real foundation or are they pure myth?

Fortunately, a very wise Providence has protected us against some of the evils and abuses that we inflict upon ourselves. If one-tenth of the current monstrosities, abuses, evil thoughts and abnormalities of similar types were to be visited upon our children, in a very short time the human race would assume the characters of horrible monsters.

Nature is wiser than all our plans and thoughts. She consequently protects us against our worst selves.

HEREDITARY TRAITS ARE FORMED AT TIME OF CONCEPTION

When the child is conceived, all the traits and characteristics which will govern that child's future life have already been formed. The sperm and ovum cells which unite to form the child have, within themselves, all the characteristics of both parents and of all the ancestors that have gone before.

From the moment of conception the only influence the mother has upon the child is through nutrition. That is, her blood furnishes the physical ingredients for growth. She is no longer nervously connected with her offspring. The nervous shock which she undergoes, the sharp mental pictures which her mind imagines, do not affect the child excepting in so far as they also indirectly, and very indirectly at that, affect nutrition.

This may, perhaps, be a very serious blow to those mothers who want to secure all the beautiful and lovely things of life in order to impart them to their offspring.

I know that many mothers are instructed to attend every kind of musical function, to look at artistic pictures, to read things that are inspiring—in short, to bring out the finest and the best in them.

It is somewhat disappointing to this type of mother to tell her that all her efforts, after the child is conceived, are relatively futile and in vain. The time to bring out the beautiful, the fine traits of character, the loveliness of body and soul is before baby has been conceived.

It is this that I mean, when I speak of "preparation for parenthood." If the future father and mother could but understand that the germ cells which they produce to form the child are merely tiny replicas of

themselves, small miniatures which not only depict every trait of physical character, but which also contain a perfect ensemble of their moral and mental traits, they would perhaps go more seriously and more earnestly into the sacred functions of fatherhood and motherhood.

A BEAUTIFUL ENVIRONMENT IS ALSO NECESSARY

I do not mean that a woman who is about to become a mother should ignore all of the aesthetic or the beautiful in order to influence her coming babe. What I do mean is that it plays relatively no part in forming a better and a more beautiful child.

However, in so far as it makes her more beautiful, in so far as it develops her body, soul and character—to that extent is she also capable of advancing the heredity of her child.

These same elements will also influence the quantity and the quality of her breast milk. They will govern her mental and her nervous reactions to her child and as they produce a better mother they also influence heredity toward the making of a better child.

CHAPTER V

PREPARATIONS FOR BABY

When the stork gently apprises mother that he is on the way with a new soul, at once mother's thoughts glowingly turn toward giving the new arrival a good reception. Every possible bit of equipment is thought of and purchased. Baby must be made comfortable. He must be made happy.

This is all a beautiful picture, but often not very sensible. There is no harm done, perhaps, where a mother has all the dollars she wants with which to indulge her whims and fancies. However, to say that all the various contraptions and garments devised for baby are necessary is quite another thing.

Although a mere man, I have had occasion to become familiar with the multitudinous array of wearing apparel that grace the shelves of the baby store. For the mother who is compelled to count her pennies the question of adequate preparation is one that must be earnestly solved. There is no necessity to drain the bankroll for baby's coming.

Preparation may be modest, yet thoroughly complete. For instance, baby must have a bed in which to sleep. It is very nice to furnish him with a cute little bassinet, then the cradle bed, and later the child's crib, but for economy's sake, why buy all three?

There is no reason why a new-born infant cannot sleep in a child's bed from the time of birth. One bed should be all that is necessary for baby from the time of coming until he is five or six years of age.

HIS BED

A bed should not be purchased until after baby arrives. When mother is ready to leave the hospital is ample time for the purchase of this item.

HIS BEDCLOTHES

His bedclothes should be of the kind that will serve for his future needs as well as for his infancy. There should be no necessity for purchasing two sets of bedding. Therefore, the blankets should be child's size and the sheets child's size instead of infant's size.

If mothers who dread the expense of the coming of baby would shave down the requirements to necessities only, they would find that baby's coming would not place a drain upon the family budget.

The care that baby receives, the love that mother extends to him and her ability to nurse him will be the determining factors in his health and happiness. The joy which he gives does not lie in the frills and foibles of feminine vanity.

CHAPTER VI

THE LAYETTE

It is oftentimes amusing to see the preparations made for the coming of baby. Sometimes hundreds of dollars are spent in the purchase of silks and laces—fine garments that are almost totally useless.

The coming of baby need not be such a terrible strain on the family purse if mother were to use a good measure of sound common sense.

Baby's clothes should be "boiled down" to essentials only. He does not need to be "all dolled up." The simplest clothing is usually the least expensive.

Baby, like his mother, is now being dressed in short skirts from the time of his birth. Four or five such simple cotton flannel nighties approximately eighteen or twenty inches long, will usually be enough for his early months.

Three or four abdominal bands, useful until the navel has entirely healed and the abdominal muscles joined, will be all that are required. These bands should not be hemmed as the hems may chafe baby's tender skin.

One and one-half dozen baby napkins of the small size will usually carry baby through to the time when the larger size is necessary. Cotton flannel or outing flannel is satisfactory for this purpose.

Three or four infants' size cotton shirts will usually complete his personal wardrobe.

Next come the blankets.

All blankets should be washable and not decorated with crocheted edges. Usually the blanket is used as an overcoat for a tiny baby, but in colder climates where this is necessary, the common type of cashmere coat and head hood are available.

To keep baby warm during inclement weather, one should rely more on blankets than on clothing.

A tiny infant may reasonably go about in the same clothes, winter and summer. It is merely necessary to increase or to decrease the amount of his bed covering to adjust the warmth to his body needs.

In a climate such as that of Southern California, neither hats, shoes, booties, sweaters, nor overcoats are necessary.

CHAPTER VII

BABY'S WEIGHT AT BIRTH

Every mother-to-be should know something about the relationship of nutrition to pregnancy. Every mother is acquainted with some of the terrors of childbirth. Experience has taught her bitter lessons and the result is that many mothers look forward to child-labor with awe, dread and terror.

Every hospital nurse can record tales of terrible suffering and torture that women have undergone because of children far too large for a small pelvic outlet. In many of these cases the cause is, to a considerable extent, self-evident.

THE "EAT FOR TWO" NONSENSE

There is nothing to be desired in a large baby at birth. In most cases it is a sign of excessive feeding. If a prospective mother were to merely do a bit of arithmetic, she would readily understand the absurdity of the "eat for two" nonsense.

The weight of the average embryo, including all of the associated structures, will be approximately twelve pounds at the close of nine months. Were you to divide this period into days you would find that the embryonic development will account for less than an ounce per day in the growth of the child together with all other structures involved.

Embryology teaches still more, namely: That only 50 per cent of the total weight is formed during the first seven months, and approximately 50 per cent from the seventh month to the ninth month. So you can see that during the greater portion of pregnancy the rate of growth is exceedingly small.

There is still another factor to be considered. Excessive food, not only increases the size of the baby, but what is more important, decreases the flexibility of the head. During the childbirth process, what is known as "moulding" of the head takes place.

A FLEXIBLE CRANIUM PREVENTS CHILDBIRTH LACERATIONS

Most of you know that the cranium consists of seven bones. Before birth, these bones are not united. During the birth process, these bones slide upon one another and "telescope," that is, where the child's head, before birth, is somewhat flattened, during birth it becomes more elongated due to the telescoping process.

The degree to which this telescoping takes place is determined by the flexibility and elasticity of the baby's bones. This, in turn, is governed by the quality and quantity of his nutrition. The more telescoping, the easier is the delivery.

Together with the elasticity of the child's head must also come the relative elasticity of the birth canal in the mother. If these structures are not flexible upon being stretched, then, of course, labor becomes a long and torturous experience.

The quality of the pelvic muscles is also determined by both diet and exercise. The mother who diets lightly will have her muscles in a much more flexible and elastic condition.

The mother who incorporates exercises as a part of her preparation for childbirth also has muscles more flexible and pliable.

Diet for pregnancy, sooner or later, will become a fine art and a science which must be recognized by people of intelligence.

CHAPTER VIII

CIRCUMCISION

The question of circumcision is one that is seldom discussed either among mothers or between doctor and parents. Most mothers permit the problem to drift until baby's actual presence in the world. Then, they are forced into an instantaneous decision—sometimes good, sometimes not so good. That is to say, most mothers give no thought to this question until after baby's coming.

The present custom is for women to have their babies at the hospital. Instead of the primitive methods, true of all animal life where the young lie snuggled up to the mother, we now have infant incubators. Whether this works more satisfactorily or not is beside the question.

The point is that the mother has very little opportunity to note the necessity or the lack of necessity for circumcision while baby is being attended to by the hospital nurses. Consequently she is, in most cases, compelled to rely on her physician who is incidentally a surgeon as well as an obstetrician. Current practice is usually in favor of the procedure of circumcision. There is much to be said on this subject.

Circumcision is a practice which comes to us from ancient times. It is incorporated in the basic religions of many creeds and peoples. Probably in those days the greatest religious leaders thought it so important that they made it obligatory by religious laws.

Its merits have been lauded by doctors, by hygienists, and by religionists. Of course, the basic claim is that circumcision prevents the irritation of smegma, the ex-

crement that gathers so quickly and inflames an area that is most sensitive.

THERE ARE TWO SIDES TO THE QUESTION OF CIRCUMCISION

I am not arbitrarily opposed to this almost universal practice. I grant that, in some few cases, circumcision is advisable and, perhaps, necessary. That, of course, must be left to the judgment of doctor and mother. But there is another side to the question.

There is no necessity for a mother to be stampeded into this operation for her child. There is seldom such a dire urgency as necessitates its being done during the mother's brief stay at the hospital. There is no reason why it cannot be postponed for, at least, several months.

Of course, I speak now from a purely physical phase and am not concerned with religious tenets, which demand that the operation be performed shortly after baby's birth.

Far too often babies who, to all appearances, seem to need circumcision shortly after birth, have been found not to need it after several months have elapsed. During the interval any intelligent nurse or physician can instruct the mother how to retract the foreskin so as to make it loose and flexible.

In most cases, care will make the operation unnecessary if the mother will merely retract the foreskin each time baby's napkin is changed and clean the entire area each morning when baby gets his bath.

Another aspect of the question should be understood. During the first few weeks of baby's infancy he is like the infant of any other animal—weak, with little strength and endurance. It takes time and intelligent care for him to gain strength and vitality.

Notwithstanding the popular concept that this operation is not a major one, that seldom do complications ensue, there is considerable shock to baby's weak and delicate nervous system. Circumcision at the age of one week or two is, most assuredly, not as desirable as at a later period—say three or four months, when baby has much more strength to withstand it. Sometimes the surgical shock may be sufficient to sharply change baby's nervous reactions, changing a "good" baby into a crying, irritable and peevish baby.

CIRCUMCISION IS NOT A PREVENTATIVE AGAINST SEXUAL ABUSES

There is still another aspect to this problem. Irrespective of when this operation is done, the entire question of its advisability is debatable. The claim that it would prevent sexual abnormality in later life does not hold true in the light of experiences or knowledge.

The foreskin, if kept clean, has a definite purpose—namely the protection against external irritations of the highly sensitive glans.

The wearing of clothes and the infrequency of bathing plus the condition of chronic constipation will often induce an irritation which the foreskin might have retarded. In other words, circumcision might induce irritation because of the absence of the protective covering. In any event the foreskin contains few nerves governing sex excitability.

Circumcision should be done only when necessary, and should be treated with the same consideration and forethought that one treats other operations of an equally serious nature.

CHAPTER IX

BABY'S BATH

Care of the baby commences as soon as he is born. His condition is determined by the common sense and intelligence that is manifested at this time.

There are a few antiquated notions that ought to be dispelled because of the harm they do to baby.

One of these is baby's first bath. It seems to be popularly understood that nothing but oil will do to remove the coating of mucus and other secretion with which baby comes into this life.

The olive oil bath is perhaps the commonest type of bath given to baby, but to those who are exceedingly poor, and to whom a dollar or so spent for the oil bath cuts quite a figure in the family budget, substitutes may be made.

The lukewarm, plain water bath will do for the baby's first and subsequent baths almost as efficiently as the olive oil.

Baby should never be given an immersion bath until the navel has entirely closed. Up to this time he should be given a sponge bath only, with lukewarm, approximately body-temperature water, using no soap. The best sort of cloth is soft absorbent sterile cotton, using a fresh piece for each bath.

TECHNIQUE OF BATHING AN INFANT

In the bathing technique, when baby's eyes are washed, be sure that the same piece of cotton is not used for both eyes. Use one piece for his body, another for each of his eyes, another for each nostril and another for between the genital creases.

Both girl babies and boy babies should have all

genital secretion washed out at each bath by the pushing back of the overlapping skin. This will keep the delicate sexual surface free from irritation.

DRESSING THE NAVEL

Next comes baby's navel dressing. By all means the most scrupulous cleanliness should be used. Naught but absolutely sterile cotton and gauze should lie next to the unhealed navel. The best way to dress the navel is to place sterile gauze adjacent to it. Make it firm with about two inches of adhesive tape on either side. Then make a complete abdominal circular bandage to hold the dressing in place. This should be snug—not too tight nor too loose.

If no infection takes place, baby's navel should be redressed once per day. If infected, it should be redressed three times per day.

There is no necessity, under ordinary circumstances, to use antiseptic solutions or astringent drugs to cause the navel to come off more quickly.

Barring complications, the umbilical cord should be detached within from two to seven days, differing with each child; but, if it does not, there is still no cause for worry, unless infection takes place.

THE ABDOMINAL BAND IS UNNECESSARY AFTER THE FIRST FEW WEEKS

Many women believe that baby should have a tight band around his abdomen for several weeks of his early infancy. This is a gross mistake due to unfortunate ignorance. As soon as baby's navel has completely closed, which usually occurs within six weeks, there is no further necessity for abdominal bands of any kind, whether for compression or for holding dressings in place.

All abdominal restrictive cloth or bandages should

be completely removed when this healing has taken place.

After six weeks baby should be left free to breathe, to kick, to squirm or to wiggle, as he pleases. This constitutes his exercise. Many a child would be saved from painful colic if he had such favorable conditions.

UMBILICAL HERNIA

There is one abnormality, however, which happens to many children, due to wrong feeding, poor mother's milk, and to many other causes. That is, letting infants cry far more than is good for them. The result is a great strain to the abdominal muscles and failure of the navel to close, or the development of a condition we term "umbilical hernia."

To prevent the loop of the intestine from intruding through the umbilical opening, take a piece of sterile adhesive tape, make a deep crease in the skin parallel with the opening, and place the tape over both ridges so as to create two ridges and a furrow that lies snugly protected, preventing the intestine from protruding.

When this contingency arises, baby should not be permitted to cry for more than four to five minutes at the utmost and he should never be permitted the intense strenuous crying which involves abdominal straining.

Summing up, therefore, a few bits of technique that must be understood for baby: First, tepid water will do quite as efficiently as olive oil for baby's first and subsequent baths; second, "any old rag" with which to wash baby will not do. Use clean, sterile, absorbent cotton or a sterile, soft rag. (Sterilization may be done by boiling in water.)

Third, the abdominal bands are not essential, excepting for abnormal conditions. They do much more harm than good.

Fourth, "let him cry" must give place to a sensible

regime when baby is ruptured or has hernia. His training will have to be forgotten until healing takes place; hence, he should not be permitted to cry strenuously nor for any length of time.

THE BATH IS MORE THAN "STICKING BABY IN THE WATER"

As we are getting away from the old-fashioned idea of merely sticking baby in a tub of water, and as our knowledge of hydrotherapy advances, we are coming to know more and more that baby's bath plays a definite part in the maintenance of his health.

Every modern hospital, to call itself modern, is usually equipped with many hydrotherapeutic appliances.

The use of water, in its multitude of forms, is increasingly becoming a valuable adjunct to the healing arts. Consequently, the daily regime which involves baby's personal cleanliness is of considerable importance.

Suppose we start from baby's birth and trace the evolution of the bath technique up to baby's more advanced years.

HIS FIRST SPONGE BATH

As you probably know, while the umbilical cord is still attached to baby's navel, he does not receive an immersion bath. The customary hospital technique is to give him a sponge bath. In the first two or three days he is rubbed over with olive oil applied with clean gauze and absorbent cotton.

When the cord becomes detached, he is still not given an immersion bath because the navel has not yet completely closed. The retention of some of the water underneath the navel folds may lead to a septic infection.

After about two weeks, as a rule, the navel is com-

pletely closed. Then a definite technique of bathing may be applied.

THE COMMON BATHTUB IS UNSANITARY

Although we consider the bathtub as one of the signs of a well advanced and developed civilization, and though we pride ourselves on our bathtub superiority to the Hottentot or to the Australian bushman, from a sanitary viewpoint, the bathtub is often worse than no bath at all.

The excretions removed from the surface of the skin always act as a poison to the body. Merely the thought of washing in water which has become polluted by washing another portion of the body ought to be sufficient to discourage the present popular immersion bath.

The bathtub, small or large, ought to go. In its place modern plumbing has designed some very fine and elaborate spray apparatus. The spray or shower bath is, in general, the only kind of clean, wholesome, sanitary type of bath.

THE SPRAY BATH

Now, to go back to the bathing of baby after the first two weeks: Practically every household is equipped with an ordinary bathtub containing either a common faucet for hot and cold water or two separate faucets. There is no necessity for a separate portable tub for baby. The permanent bathroom tub should be sufficient for him from early infancy onward.

In preparing baby's bath, the tub should be merely the container for baby but not for the water in which he is bathed.

I know mothers get considerable delight through baby's splashing about. This old-fashioned picture is one that pleases mothers immensely. Nevertheless,

baby can get just as much joy out of his bath if it is given without filling the tub.

First be sure that the tub is scrupulously clean. Then place baby on a pad made of bath towels, napkins or other soft material. Let him kick about for a couple of minutes before applying any water. Keep the plug out; turn on the water to a temperature of about 90 to 94 degrees. This is tepid; neither warm nor cold. The old-fashioned "elbow thermometer" that mother so often uses ought to quite suffice.

From the flowing tap water mother should first give baby a hand-rub, rubbing his hands, feet, chest, back, abdomen and face in order.

When his body is thoroughly wet from the hand-rub, he is then ready for a gentle spray. Every hardware merchant carries detachable shower sprays, which can be attached to any of the common type of faucets.

If baby needs cleansing with soap, pure castile soap is about the best type to use. Soap him where he needs it. Then wash off the lather by means of the spray.

He will enjoy the contact of the spray against his body quite as much as he would splashing in the water. His face should be cleansed with a clean, soft wash cloth.

ADAPTING BABY TO HIS BATH

After baby is three months old, the spray should gradually become cooler and cooler toward the end of the bath. During the summer this change may be made quite freely. During the winter months, unless baby has been thoroughly adapted to this kind of bath, the water should not be "tap cold," but may be quite cool.

After he has been thoroughly cleansed, he should be wrapped from head to foot in a large absorbent nap-

kin. Don't be afraid to rub him fairly vigorously. No mother will hurt her child.

A proper reaction from the bath should produce that glorious pink glow which makes baby so beautiful.

For normal healthy babies, a hot bath should not be given. It is devitalizing and produces considerable lassitude because of its extraction of energy. The reaction from a hot bath is often chills and shivering.

BATHS WITH ANTISEPTIC DRUGS ARE FOOLISH

Orthodox medical practice, in their constant fear mania against "the bugs," are ever seeking to keep baby sterilized and antiseptic. Thousands of mothers are bathing baby's eyes, mouth and, sometimes, even the ears, with antiseptic solutions, usually boric acid. The only reason they ascribe is that "the doctor said so."

For a normal, healthy baby, boric acid is a mighty poor substitute for the natural secretions present in baby's mouth and eyes. Anything strong enough to kill germs is most assuredly sufficiently injurious to destroy baby's health.

Most emphatically, boric acid or any other antiseptic wash, lotion or ointment is not an adjunct or an accessory to baby's bathing regime.

THE NUDE BATH

As baby grows into childhood, during the summer months especially, he should very frequently be permitted to play nude, or, at least, in his bathing suit in the back yard. During the dog days of a typical heat spell mother should turn the garden hose on him several times during the day. If he is nude, let him dry off in the sun.

A healthy child, nude in the sunlight, will not catch

cold if the garden hose be turned on him and if he be permitted to remain in the warmth of the sunlight.

THE HEALTH VALUE OF COLD BATHS

I cannot speak with enough praise concerning the gradual adaptation of baby to cold baths. If, by the time he is two or three years of age, he has become adapted to cold bathing, he will be almost completely immune to the periodic winter colds which so harass baby's early years. His skin will become resistant to the rapid changes of temperature which so frequently are the immediate predisposing causes of colds.

His pores will open and close rapidly and consequently adapt themselves to the quick changes necessitated by changing temperatures.

His skin will become a splendid functioning, eliminative organ, capable of doing more than its proportion of the work of toxic elimination.

Bathing of the proper kind is inevitably bound to be recognized as one of the most valuable therapeutic agents to keep baby well and strong.

CHAPTER X

HOW TO DRESS BABY

Perhaps what I shall present in this chapter is well known to every mother. Nevertheless, a great many criticisms may be directed at the manner in which baby is dressed.

Very often mothers bring infants to me dressed in garments which, if we could transfer them to the mother's body by relatively increasing the size, would be veritable torture instruments.

There is a definite technique in making baby comfortable which every mother ought to understand.

First and foremost is the question of cleanliness. Baby's napkins should be changed during his waking periods immediately after they are soiled. This should be a hard and fast rule. A mother who neglects this is guilty of gross negligence in the health welfare of her baby. To have the body excreta lying close to the skin, sometimes for hours, is irritating, inflammatory and productive of much of the skin lesions so commonly seen in babies.

HOW TO CLEANSE BABY'S CLOTHING

Next comes the question of cleansing baby's napkins. In the present day of washing machines and laundries, strong caustic alkalines and acids are used to dissolve the excreta and to cleanse soiled napkins. I would have no objection to these were it not for the fact that, very often, the caustic soaps and laundry materials are left in the drying napkin.

Baby's skin has an absorptive and retentive power. When the napkin is saturated with these irritant laun-

dry materials, it is inevitable that some of it be transferred to baby's skin and thence to his blood stream.

Baby's napkins should be washed in the softest kind of soaps and should be thoroughly rinsed in several rinsings of water and then exposed to the sunlight for at least eight hours. Nothing starched should ever touch baby's skin. His napkins should be soft, flexible and pliable.

ADJUSTING HIS CLOTHING

Next comes the manner of adjusting the napkin to baby's body. There are two established methods of fastening these garments. One is known as the triangular method which is suitable for girl babies only. In this method the garment is folded into a triangular shape and all three points come together and are pinned with one pin.

For boy babies the square method is the only satisfactory one. The napkin is adjusted somewhat like a pair of trousers, using four pins—two for each leg, leaving that portion of the napkin covering the genital organs very loose.

Next comes the question of supporting baby's napkin. I have seen mothers who fastened this garment round the body so tightly as to leave red marks on the abdomen. If you have ever had a bandage around your limbs or abdomen you would readily realize how uncomfortable a tight, restricting garment would be—how much more uncomfortable to baby with his delicate skin and his soft unresisting muscles!

Baby's napkin should never restrict free abdominal breathing. The upper pin should be attached to his undershirt.

WHEN BABY GOES VISITING

Next comes the problem of dressing baby for visiting. When mother puts on her choicest visiting afternoon frock, it is thoroughly undesirable to have it soiled by thoughtless baby. Knowing this she uses protective measures. She purchases a pair of rubber bloomers for baby which are impervious to air or to moisture.

Babies have been brought into my office with skin chafed, with the leg creases thoroughly irritated and inflamed. The cause has been the wearing of these rubber garments for a few hours. Their very impenetrability to air and circulation is, of itself, sufficient to produce irritation, but when we couple this with the foul odors of baby's excreta being compelled to remain in a closed atmosphere, away from the oxygen of the air, the irritation becomes much more intensified.

I realize that mother must protect herself and keep her garments clean. This she can do much more readily by putting two, three or even four layers of napkin on baby. Even four layers of napkin will permit a circulation of air and, at the same time, will not allow the body excreta to filter through.

Mothers who follow these self-evident principles will do much to avoid the frequently encountered chafing and inflammation which one finds with so many babies.

CHAPTER XI

CONGENITAL DEFECTS

Although the general tendency of Nature is to start each infant on the road of life with a perfectly good bank balance represented in terms of good health and normal physique, yet sometimes we are confronted with the "mistakes" of her efforts.

Infants from the time of birth have been marked with a physical abnormality of one kind or another. Congenital defects, although not exceedingly common, nevertheless present a serious problem in their handling.

We may divide this group of abnormalities into two categories; namely, those which are remediable and those before which we are left practically impotent.

BIRTH DEFECTS THAT CAN BE REMEDIED

In the first group we have such cases as "cleft palate," "harelip," "tongue-tiedness," "clubfoot," "congenital dislocation of the hip," "bow-legs," and blemishes of the superficial skin features such as the nose and other malformations of a similar nature. Most of these may be remedied by constructive surgery. In this realm modern surgery is capable of doing its most noble work.

The reconstructive arts are such that a cleft palate, the incompleted work of Nature, may be remedied by the surgeon's knife. A mere slit of the membrane holding the tongue to the lower mouth is sufficient to overcome tongue-tiedness. Harelips are easily corrected by the art of the surgeon.

I have seen some of the finest surgical reconstruction work applied to bow-legs in children. The breaking

of the foot bones and casting them to better form is a type of surgery that is exceedingly meritorious for those who desire it.

BIRTH DEFECTS THAT CANNOT BE REMEDIED

However, when we are confronted with the problems of the more serious defects of Nature, unfortunately we are left relatively helpless. For instance, congenital blindness is something which may be prevented by the proper antiseptic procedure, but, when once achieved, is practically hopeless in abating.

Congenital deafness and, with it, the associated problem of dumbness (for a child cannot learn to speak unless he first is capable of hearing) is another defect of Nature which leaves us with very few remedies at hand. The only recourse is a long, tedious, patience-straining program of re-education so that the child may, in a limited fashion, adapt himself to social contact and, in some measure, be self-sustaining.

Then we have the type of congenital abnormality of a relatively harmless nature, of a kind which will not impair normal physiological function and which only interferes with external beauty.

In this classification we may group warts, moles, birthmarks and similar malformations. Here, unfortunately, we find a fertile field for an immense number of useless operations and quackish exploitation. The nostrums, lotions, salves, washes, ointments and other forms of medication intended to neutralize or destroy congenital skin defects furnish a ready field for commercial quackery.

It is true that we do not desire to have a skin blemish of any kind. Most of them had better remain than be treated by remedies of this kind. Far too often the cure is worse than the ailment. Far too often the

result of treatment to overcome congenital defects works untold injury and destruction to health.

In those defects where surgery is well able to do its work, it would be the height of folly not to resort to it for proper reconstruction. The mother who would not permit her child to undergo a minor surgical operation to correct harelip, cleft palate, or tongue-tiedness is subjecting her child to a serious handicap for the rest of his life.

As concerns those defects of the second group, such as blindness and deafness, much may be done toward compensating for Nature's losses. It is genuinely astonishing to see the truly marvelous work being accomplished in educational training to offset the loss of one of the senses.

The schools for the deaf and the blind often produce prodigies of learning and intelligence. To reason that because Nature has forced a congenital defect upon a child is sufficient justification to assume that he can no longer function usefully and happily in society is to assume a conclusion contradicted by facts.

Nature is wise but sometimes she blunders—then the art of man must intervene—and oftentimes the art of man will furnish full compensation for the blunders of Nature.

CHAPTER XII

BONE DEFORMITIES

Every physician who uses his observation powers has frequently noted, during his examinations of children, the early formation of bone deformities.

Osteopaths and chiropractors have especially observed the frequency with which spinal curvature is seen in children.

It is almost as common to see a child walk with ankles bent inward and bones distorted as it is to see the normal walk.

What is it which causes these marked abnormalities so early in life? Most assuredly they are not present during the earlier months of baby's career. As I have repeatedly stated, most children are born fairly perfect—at least not with any of the marked defects which are apparent as baby climbs into his third, fourth and fifth years.

There must be something which is responsible for the accumulation of these deformities and which makes them a very common clinical picture.

A clearer understanding of what takes place may be secured by an elemental knowledge of bone physiology and development. We may then trace, step by step, the processes which induce the changes from the normal to the abnormal.

THE EMBRYONIC FORMATION OF THE BONES

In embryonic life, while the child is still unborn, in the strictest sense, he has, in reality, no bones. His "bones" are nothing more than gristle, technically known as hyaline cartilage. The flexible and movable

cartilage of the nose is a typical example of this kind of cartilage.

The nasal cartilage never hardens, even in old age, and remains true to its embryonic type. However, most of these cartilaginous formations have, within them, the nucleus for ossification or hardening. Inside of them there are centers from which ossification or hardening of the bones radiates. By the time the child is born his long bones consist usually of three of these centers.

As we look at the typical bone we see it divided into three portions, a long, bony segment in the center and two hard, bony portions at the ends, separated by an isthmus of gristle or cartilage.

It is this cartilaginous formation, the fact that baby's bones are partly made of gristle for several years after his birth, that makes his bony framework so flexible, so elastic and resilient. This is Nature's profoundly wise protection against the bumps and falls that baby is constantly subjected to.

Were his bones as hard and as brittle as the adult's, the history of baby's life would be checkered with fracture after fracture. Fortunately, wise Nature has made provisions for the time when baby stumblingly learns to walk.

As baby grows older, bone solidification proceeds apace. The older he becomes the less cartilage he possesses and the more bone is formed, both proportionately and quantitatively.

Not only are the cartilages slowly changed to bone, but they also assume increased brittleness and hardness. Consequently by the time of puberty, or approximately the age of thirteen or fourteen, the child is almost as prone to fracture as the adult.

Now, using this as a background of our knowledge,

we may proceed to build up an hypothesis concerning the abnormalities of baby's poor bony development.

THE FOODS THAT PRODUCE STRONG BONES

What is it which converts the cartilage into bone? Why is it that, in the cases of bony distortions, the bones do not form in a normal manner? The answer to the first question is that cartilage is converted into bone by the deposit of the precious mineral salts, found during baby's nursing regime, in mother's milk and, later in life, found especially in the fresh and dried fruits, in the vegetables and the whole grain products.

Calcification requires the deposit of lime salts commonly called calcium salts. A deficiency in these salts means that the cartilage does not have the essential nutrition to be converted into bone.

The answer to the second question ought to be apparent from these deductions. Due to the failure of the deposit of sufficient mineral salts, especially calcium, in the mother's milk, the cartilaginous portions of the bones do not receive sufficient of the mineral nutrition to fortify them against baby's increasing bulk and weight. Consequently, the bones do not grow in the same ratio or proportion as the rest of baby's body.

When baby is one year old and the weight of his body has tripled from the time of his birth, the strength of the bones has not increased threefold. At about this age the primitive impulse to walk is present in baby. He attempts, by various processes, to stand on his feet, to crawl and, in his clumsy fashion, to walk.

His ankles bend under him. The tendons, ligaments and muscles which are attached to the various bones lack the necessary suppleness, strength and vitality to withstand the strain.

Sometimes he walks with ankles inverted, sometimes flat-footed, often knock-kneed and, in very many cases,

in order to balance himself properly, in an abnormal posture, ultimately productive of spinal curvature.

THE MINERAL SALTS ALSO MAINTAIN THE ALKALINITY OF THE BLOOD

These precious mineral salts found in the natural foods and in mother's milk are not only the source of adding firmness to baby's bones, tendons and ligaments, but also supply the necessary alkalinity to his blood which makes him strong, firm and resistant. These vital elements of food are the cornerstones, the keynote to baby's health, strength and vitality.

Summing up, therefore, let us see what factors may be productive for keeping baby's body straight, firm and strong.

First and foremost, there is no substitute for mother's milk. The cow, the goat and the can are foster-mothers of a very poor variety to baby. The mother who fails to nurse her child through willful neglect or because of disinclination to do so, is guilty of a monstrous crime against her beloved baby.

The first year of baby's nursing establishes him on a firm foundation. If this foundation is lacking he pays the price in the years to come.

Next comes the period after weaning. If mother uses the innate common sense which the motherhood of every living animal possesses and which the human should possess in the highest form, she will know that the countless food adulterations are not proper foods for her precious little one.

She will understand that, in the realm of the great sun-kissed fruits and vegetables, in the whole grain bread-stuffs, and in the succulent nuts, she will find a suitable diet for her babe. She will understand that such products as sugar act as the "white man's curse,"

the leech of those precious ingredients so necessary and vital for baby's development and growth.

Not only will she understand that the feeding of the simple coarse, unrefined and undenatured foodstuffs are good and wholesome for that tiny growing body, but also that the sun is the great life-giver and protector of health.

She will understand that bathing his body in the life-giving rays of the sun will do much toward keeping his blood sweet and clean and toward furnishing that vital spark, the mysterious something, that sunlight alone is able to furnish.

All in all, maintenance of baby on a diet, first of his own mother's milk, at least until his incisor or front teeth have fully formed, and secondly, the use of natural sun-kissed fruits, whole-grain cereal products, the undenatured vegetables, the succulent nuts and milk, will furnish the necessary dietetic ingredients for making baby's bones hard, firm and supple.

These, associated with the life-giving power of sun bathing baby's naked body, will do more than all the much advertised drugs or chemical concoctions to produce straight bones in an undeformed, healthy and virile body.

CHAPTER XIII

RICKETS

Health writers have written so much about rickets, have warned mothers so repeatedly to guard against it that the clinical picture is fairly common knowledge.

Most mothers, when they visualize rickets, have a mental image of a child with a large protruding abdomen, white flabby skin, lusterless eyes, and a severely retarded development.

To a considerable extent this picture is correct, for rickets is an underdevelopment characterized by these indications and internally manifested by a failure of proper bone development.

Rickety children will often go two or two-and-a-half years before they learn to walk and, when they do learn, their walk will be wobbly and unsteady with ankles bent and muscles weak.

These children often need corrective footwear and sometimes appliances or braces to straighten malformed bones. However, it is not my purpose in this article to describe a clinical picture of rickets, for most mothers know it. My object is to forestall some of the obnoxious methods in its treatment.

The medical profession is futilely grasping at symptoms, figuratively barking up a wrong tree in their attempts to overcome rickets.

In a hazy sort of way they know that something is wrong with the diet. Were their reasoning to go back far enough, the remedy would be as apparent as the nose on the face.

VITAMINE DEFICIENCY RESPONSIBLE FOR RICKETS

The diet is deficient in a mysterious substance known as *vitamines*.

Rather than change baby's diet so as to include these all-important *vitamines*, with typical inconsistency, they proceed to find back door entrances where the front door is the shortest way in.

They know, for instance, that the oil of certain fish, notably the cod, is rich in *vitamines*. This oil is extracted, emulsified and used as a specific to furnish the necessary *vitamines*.

Rather than alter the diet, the distasteful cod liver oil is given as an auxiliary. Sometimes its stimulating effect seems to liven baby. Most of the time it is ineffective, but it constitutes an effort to do something and, of course, enriches the drug dealers.

For a child suffering from rickets, cod liver oil is not the sensible plan. The cause lies mainly in the diet and to a lesser extent in heredity.

Place in the diet those ingredients known to be tremendously rich in the natural *vitamines*: the raw fruits, including their juices, the raw vegetables containing the *vitamines* in the most wholesome, assimilable and useable form.

THE FRUIT AND VEGETABLE JUICES CONTAIN THE NECESSARY VITAMINES

A rickety baby should get two ounces of raw fruit juice or vegetable juice for each month of his age up to nine or ten months. From this time on he should have the whole fruits. Then his diet will not be rachitic.

Lately, modern medicine is "discovering" a discovery which has been known to the drugless profession for many, many years—namely, that sun baths either contain or stimulate antirachitic *vitamines*.

Every child suffering from rickets is also suffering from insufficient sunshine. If your child is pot-bellied, soft-boned, pale-skinned and immaturely developed, sun baths will literally work wonders in overcoming these ailments.

All in all, the inclusion of a natural diet and of a graduated program of sun baths (of course preventing sunburn), will do more toward helping your baby overcome this very prevalent disease than will tons and tons of the smelly oils of more smelly fish.

RICKETS AND ARTIFICIAL FORMULAS

Rickets is a nutritional disease. On this point all authorities agree. There may be differences of opinion as to what genuinely constitutes rickets, but essentially, the general understanding is the same.

When the quality of growth is seriously impaired, when baby's body grows fat and flabby, bones soft, muscles weak, vitality sluggish and low, cheeks paunched, abdomen protruding, with constipation, colic, distress, and crying always present—we have a more or less general picture of rickets.

There is every modification and every conceivable type, some mild, some advanced.

Most mothers have a general knowledge of what rickets mean. Few, however, appreciate the tremendous importance of food. Of all the aspects of care of the baby, his food is more important than all else combined. His animal needs, food, warmth, shelter and sleep, are the primary requisites for his development.

MOTHER'S MILK IS AN ANTI-RICKETS SPECIFIC

During his early infancy, the principal "specific" for the prevention of rickets is his own mother's milk. It sometimes makes one's blood boil with anger when one sees the number of mothers who stupidly and deliber-

ately stop nursing their little ones. It makes one doubly furious when a mother feels quite relieved that this burden of responsibility is off her and she no longer needs to nurse.

Many mothers believe that they can raise their babies just as well on condensed milk and patented food. These mothers, notwithstanding their intelligence in other directions, ought not to be blessed with the care of children.

However, since the damage is done, the question of cure is just as important. Once baby is weaned, it is too late to bring back his natural food supply.

What is suited for baby after he is weaned?

Here we run the gamut of modern ingenuity and substitutes. We have substitutes for steel, for rubber, for linens and for leather. We have substitutes for this and substitutes for that. Substitution has thoroughly saturated the realm of dietetics as well as other fields.

Rickets is a disease of substitutes when we desire to replace the vital, life-sustaining ingredients of natural food with refinements, advocated by our modern food industries.

RICKETS IS A DISEASE OF STARVATION OF ESSENTIALS

Rickets is, in reality, a disease of starvation, notwithstanding the liberal quantities of food which are given to the child. It is starvation of those elements found only in natural food.

Thousands of doctors prescribe such concoctions as lactic acid, lime water, corn syrup, condensed milk, sterilized milk, milk powders, refined malt starches, white starvation sugars, stimulating beef extracts and a whole host of others. No other baby of any animal could live a month on such a diet except the highly adaptable human infant.

These foods are not only starvation foods in them-

selves, even though fed in liberal quantities, but, like all other super-refined unnatural products, they extract from the health that is already there instead of adding to it.

Take white refined cane or beet sugar as an illustration. Not only is it a starvation food because it contains none of the precious vitamins or mineral salts, but also because of its lime-leaching powers. In order to neutralize its high acidosis properties, the blood and bones must give up their precious calcium to destroy the toxic effects of white sugar. Consequently, we have lime starvation and through it, rickets.

The same is true of refined syrups, and of condensed and sterilized milks.

The vital principle, the life-essential substance, is bound to be destroyed, either by the addition of chemicals or by the sterilizing effect of heat.

CHAPTER XIV

UNDERFED AND UNDERWEIGHT

It is a regrettable but actual fact that far too many mothers govern the treatment of their children exclusively by their physical appearance.

"Baby looks thin" or "baby looks pale" or "baby looks fat." Tersely, these are the common expressions used by mothers the world over.

There seems to have grown up in the public mind (due to an immense amount of propaganda by the medical profession) the idea that underweight is synonymous with underfeeding.

The mere fact that the child does not register up to the weight indicated in the tables is usually sufficient justification for the average mother to devise ways and means whereby she can get the maximum quantity of food into baby's digestive system whether he needs it or not.

With no group is the topic more fit and proper than with the children.

Children are relatively helpless in the hands of their parents. They suffer from their parents' mistakes without being able to protest excepting as they become ill and suffer pain.

WEIGHT IS NOT STRENGTH

In every public clinic, baby show or school examination almost the first thing that is done to the child is to weigh him. To me it is often laughable, just as if one were weighing beef on the hoof at so much per pound. The values of human health are not measurable in terms of pounds.

The criterion of physical and of mental efficiency is not determined by the scale. A heavier weight is by no means an indication of a better health. If anything, it is often the reverse. Barring extremes it has been noted repeatedly that the child having little or no surplus fat on his body has a greater resistance than the child who is stuffed to the nth degree.

In every publication dealing with child welfare, tables of age and weight and height are given. Mothers are trained to use these tables as definite standards. Because of them they subject baby to forced feeding in order to bring him to the weight called for in the tables.

For instance, we have all seen mothers whose baby weighed a pound or two less than the usual weight. Notwithstanding that baby would be in relatively sound health, mother would become so worried about it that she would resort to unwise and excessive feeding in order to bring him up to the standard.

Doctors have classified various types of foods according to their weight-building, fat-producing properties. For instance, orange juice and other of the watery fruits supposedly have little weight-building properties. On the other hand super-refined cereals such as the starchy extracts of wheat, the concentrated or rolled oats, corn meal mush and similar foods are classed as weight-building foods.

When mother finds that baby does not conform to Mrs. Jones's baby or to the mass statistics evolved in the table, she utilizes this knowledge by overfeeding baby with cereals and with other fat-producing foods at the expense of his general health.

THE ILL EFFECTS OF OVERFEEDING

It has been proved conclusively that enlarged tonsils, the formation of adenoids, and the frequent and excessive colds so often seen in many babies, is largely due to

the excessive consumption of refined cereals and bread-stuffs.

Even baby's active body cannot withstand the huge consumption of starches so often found in his dietary.

Typical dietaries as given by public clinics and magazines interested in child welfare almost universally are guilty of the same dietetic errors. They give far too much cereal starch and almost exclusively confine themselves to the refined variety.

There is nothing injurious in cereals. Cereals are good wholesome foods but they must be whole grain cereals—the same kind you feed the cow, or the hens in the back yard, only perhaps a trifle cleaner.

Again, there is no condition of baby's health in which cereals should be on the dietary more than once per day. Babies under ten months of age need no cereals whatsoever.

From this period on they should be fed cereal once per day and once per day a by-product of cereal such as bread, crackers or muffins made without baking powder or shortening.

Cereals, however, do not constitute the only dietetic crime in the forced feeding process to bring baby's weight to normal. The dairy products come in for their full share of the blame. There is just as much forced feeding of milk as of cereals by mothers who stupidly desire to bring their babies' weight to that called for by the tables.

This dietetic crime is committed in two ways, first by the excessive consumption of milk and secondly by the overconcentration of milk or of its products.

There is no reason to feed baby more than once every four hours at any period of his development. If he is a child more than a year and a half or two years old, milk twice per day should be ample to meet his need. Mothers who resort to the two-hour stuffing process to

bring baby's weight up will, inevitably, produce the chain of indispositions characterized by constipation, large tonsils and adenoids.

Again, there is no dietetic justification for concentrating the milk baby consumes far beyond its natural composition. Mothers who feed cream or the "top of the milk" to baby in the belief that they are doing him a great favor are mistaken in their good intentions.

MILK SHOULD BE DILUTED, NOT CONCENTRATED

The human child was intended by Nature to consume human milk. If this is unavailable then the cow's milk or the goat's milk he receives should be diluted to approximately the natural consistency of human milk.

Instead of permitting the milk bottle to stand until the cream forms on top and then pouring the concentrated cream for baby, it would be more advisable for general dietetic purposes to thoroughly shake the bottle so as to secure an even distribution and then serve.

Even normal cow's milk is, especially in summer time, often too rich and too concentrated for many children. The best grade of certified milk ought to be diluted about one-quarter with distilled or boiled water.

Many of you may wonder how baby's weight is to be built up if not by the excessive consumption of cereals, milk or milk concentrates. Many mothers will probably be asking, "Well, how can I bring baby's weight to normal?"

WHAT IS NORMAL?

The only answer is, "Why should you bring baby's weight to normal?" What is "normal"? Who established "normal"? How did doctors get "normal weight"?

Thousands of babies' weights were taken. Half of them were above "normal" and half below "normal."

What the tables really should use instead of the word "normal" is the word "average," for there is no such thing as "normal" weight.

Now, why in the name of common sense should you want your child to be "average"? Each child is an individual unto himself, with his own marked personality and his own peculiar individuality.

Unless there be extreme emaciation or overweight, the soundest advice I can give you is to forget the weight tables.

Concern yourself with baby's health, with his vitality, with his mental development, and with his general physical reaction. If baby sleeps well, digests well, has two or three good eliminations per day, shows no sign of pain, evidences no discomfort, is free from disease and develops no abnormality or deformity, please let Nature take its course and stop worrying.

CHAPTER XV

WHEN BABY HAS FEVER

There is scarcely a child who, at one time or another during its infancy or its early childhood, is not subject to the ravages of burning fever.

The little face flushed, the eyes bright, the body tossing restlessly about, faint moaning wails so characteristic—these are some of the manifest phases of fever.

Unfortunately, fever is a symptom in virtually every child's disease. It is commonest of all symptoms and, invariably, a factor which calls for consummate skill.

Even though we have other varied external signs of fever, yet the only definite determination is made by means of the Rectal Clinical Thermometer.

The accurate determination of temperature is made by thrusting a lubricated thermometer about one inch into the child's rectum.

DETERMINING THE TEMPERATURE

There is a definite technique in taking a child's temperature. The best and most practical position is with the baby lying on his side, feet flexed close to chest.

Dip the thermometer in a lubricant, olive oil (or any other salad oil). Spread the rectal muscles apart gently and, by an even turning motion, insert the lubricated thermometer.

The rectal thermometer is different from the mouth thermometer, in so far as the bulb is very much thicker and relatively less easy to break.

Use great care to prevent the baby from turning back on his side and forcing the thermometer too high into the rectum and possibly breaking it. The ther-

mometer should remain in the rectum for two or three minutes in order to secure a safe and accurate reading.

To read the thermometer hold about twenty inches away with the dull portion furthest from the eyes. By slowly turning horizontally, a very thin column of silver-colored mercury may be seen. The number to which the mercury column rises is the degree of temperature.

NORMAL AND ABNORMAL TEMPERATURES

Bear in mind that rectal temperature is usually one degree higher than mouth temperature. The normal mouth temperature is about 98.5 while the normal rectal temperature is about 99.5.

Fever is merely a symptom of deeper elimination taking place within the baby's body. Usually it indicates that Nature is burning up waste tissues faster than usual.

A minimum temperature of one or two degrees above normal may be safely borne by practically any child with no treatment.

As a general rule it is inadvisable to treat or to use any corrective measures for a slight rise in temperature of this kind.

Barring complications, there is usually no danger in a mild cleansing fever. If only we would let Nature alone! Instead, we find a perfect mania on the part of the mothers or others "to do something."

"Baby has a temperature! What shall I do?"

This is a paramount question invariably asked by mothers confronted with this problem. "Doing nothing," would be vastly more helpful "than doing the something" done by most unthinking mothers.

Assuredly there is no place in the intelligent treatment of fever, for the use of anti-fever medicines.

ANTI-PYRETIC MEDICINES SUPPRESS BUT DO NOT CURE FEVER

Practically all anti-fever medicines are derived from coal tar distillations. Phenacetine, acetanilid, antipyrin and antifebrin are a few drugs used to combat fever. Their promiscuous use endangers the child's health. They suppress symptoms and stop Nature's healing processes.

Driving waste matter that is seeking to escape into the deeper tissues—paralyzing baby's nervous reactions, weakening and depressing baby's vitality—all these, merely in order to get a normal temperature reading. Aye, I can even go further than this.

It has been claimed, on good authority, that complications coming in a fever could not have arisen unless induced by the interference of medication. That is to say, a reasonably low fever, left alone to run its course, would do vastly less harm than a complicated fever where drugs have been used for suppression.

Fever is Nature's consuming fire. A fire, when used to destroy garbage or debris, is wholesome and constructive, but like all fires, it must be kept rigidly under control.

A fever that is permitted to spread consumes the body and defeats its constructive purposes.

Therefore, to sum up—what should be done in the event of baby's fever? If the fever be slight, merely a degree or two, it is best to take no positive action, merely the general actions covering all fevers.

CONTROLLING THE FEVER

These general actions are: First, reduce the quantity of food the baby is consuming, or if he refuses food, stop it altogether; second, give him all the cool drinking water he will take.

Do not become worried, if baby turns away food for twelve or twenty-four hours. Remember his tiny little body has much more knowledge than all the scientific and learned investigations of reputed scientists.

When his body needs food he craves it. When it doesn't he spurns it. Trust in the wisdom of Nature's reactions. Do not worry about baby's starving to death.

Babies have been known to go as long as three weeks without a morsel and have fully recovered. So do not believe that baby's refusal to eat for twelve or twenty-four hours will be inimical to his health or will endanger his life.

"FAST THE FEVER"

"Fast the fever," should be a common slogan in the treatment of virtually all fevers.

It is difficult to place a baby on an absolute fast, but we can place him on a minimum restricted diet. If he be breast fed, stop every second feeding and substitute water.

If he be formula fed, double or treble the water dilutions, giving him the minimum quantity of milk and the maximum quantity of water.

Next, wash his bowels thoroughly and well by giving enemas, preferably until the discharged water appears free of bowel discharges.

Watch the baby carefully for other symptoms. Look into his throat to see if there are any membranous formations. Feel the glands of the neck for enlargements. Look at his tonsils and see whether they are inflamed, pus forming, etc.

Take the temperature twice a day.

Above all, stop worrying. Remember, no matter how tiny your infant may be, no matter how meagerly

his intelligence may be developed, he is on the same mental wave length as his mother and dad.

When the mother is worried the baby is worried. This is more true when the mother nurses the baby, for then the milk is worried and troubled.

Finally investigate the reason for baby's fever. Invariably there is something wrong with the diet. Find out what it is and correct the cause.

CHAPTER XVI

“A HOME EXAMINATION”

MOTHER IS THE DOCTOR

In the final analysis mother is the physician employed more often than any other. It is she who bears the responsibilities involved in both sickness and in health. It is she who must nurse back to health every member of the family. Their physical welfare is her individual responsibility.

To do this noble work well, to be doctor and mother in one, she should be trained and well prepared. It is not necessary that she call a doctor at the sign of the slightest disturbance. She should understand the actions and reactions of the human body in both health and disease. To accomplish this best, she should be able to distinguish the normal from the abnormal.

Forewarned is forearmed. Every disease casts its shadow before.

ALL DISEASES USUALLY HAVE SYMPTOMS PRECEDE THEM

There is scarcely a disease of childhood which does not have some premonitory symptoms. These symptoms should be readily understood and perceived by mother. Every mother is continually on the watch for signs of ill health in her little ones. Some, however, know how to watch intelligently, while others observe—well—apathetically.

A child cannot express himself as an adult. He cannot give vent to his various pains and aches. He cannot assist either in the examination or the diagnosis because he can furnish no “case history” as we doctors call it.

When a child acts cross and irritable, there is usually a reason. Mother should be on guard and find out what is wrong. Perhaps the digestive system is overloaded or clogged with gases. Perhaps elimination is faulty. Perhaps he has had a bad fall or an internal injury. Perhaps his diet is wrong or his nervous environment faulty.

MOUTH EXAMINATION

Make an examination of the throat. This may be done by using the handle of an ordinary teaspoon. Look at the back portion of the throat and mouth. If it is inflamed something is wrong. If white spots are present you had better consult the doctor.

If the tonsils are enlarged it is an indication that the diet should be changed so that the gland enlarging foods are eliminated. It is not necessary to cut out enlarged tonsils. The theory that enlarged tonsils are responsible for other diseases such as heart trouble, rheumatism, digestive trouble and the like has long been exploded.

Periodically examine your child's teeth, gums and tongue. Cavities should be given immediate attention. Do not wait until they have become extensive. In this period of our civilized refined living, dental work is necessary for children as well as for adults.

Next, the breath of a child should be sweet and wholesome. Foul and acrid odors are usually indications that the digestion is faulty and that elimination is more so.

HEARING DEFECTS

Pay more attention to your child's hearing. Sometimes the ear wax becomes hard and clogs the ear drum. Notice if he fails to hear you in ordinary conversation, or if he misunderstands your words.

Sometimes a few drops of warm olive oil will lubri-

cate the ear quite effectively. Again it is often quite necessary to syringe the ear with tepid water in order to remove the waxy accumulation.

THE TEMPERATURE

A clinical thermometer ought to occupy a place in the emergency cabinet. I do not advocate the "thermometer mania" so characteristic with many mothers. At the least sign of the slightest disturbance, in goes the thermometer and up goes mother's mental temperature. When, however, baby's eyes are bright, his cheeks flushed and his body hot, take his temperature.

Remember that in small children, temperature is usually one degree higher than in adults. A fever of one or two degrees, unassociated with other symptoms, may usually be ignored. When it rises beyond this point, hydrotherapy is a most effective antifever remedy.

POSTURAL ABNORMALITIES

Early in baby's life, mother should pay particular attention to posture and to the normal development of the bones. The sooner a curved spine is treated, the more quickly it comes back to normal. By treatment here, I mean both osteopathic and chiropractic manipulation in conjunction with a long routine of corrective spinal exercises.

It is a crime to permit a child to go through life with a spinal curvature. It will ultimately prevent his athletic development and may seriously retard health for his entire lifetime.

It is during the early years that spinal curvatures are easily corrected. After puberty, when the body structures are hardened and become firmer, the task is increasingly difficult.

Mothers should frequently observe baby's spinal posture. Note if one shoulder is higher than the other. Observe if he has an inclination to rest on one hip. See that his shoulders are thrust back instead of slumping forward. See that the stomach is held in, instead of protruding.

FLAT FEET AND FALLEN ARCHES

Flat feet, fallen arches, knock-knees, bent ankles—these are very common ailments found in childhood. Most of them, if seen early, are easily corrected and much more easily prevented.

In this day of concrete walks and hardwood floors, flat feet, especially, are very common among children. Mothers may easily detect this.

Wet baby's foot in water. Have him stand on a piece of dry paper. See the impression made by his foot. Ordinarily, the inner surface should be somewhat curved, indicating a well-formed arch. If this is not present, the chances are that he is suffering from flat feet.

What measures are efficacious? Here again, first and foremost, the diet should be such that the tendons be well supplied with a healthy blood stream. Corrective exercises are of inestimable value.

Orthopedic shoes of various makes have been devised which meet the situation admirably. Sometimes arch supporters are necessary but these should never be used unaccompanied with corrective exercises.

Bow-legs sometimes require the help of the surgeon. Again, one may often procure excellent results by means of corrective exercises.

Knock-knees and protruding abdomen are sometimes indicative of rickets.

WHEN BABY WALKS

While I am dealing with these orthopedic questions, I would like to correct a popular mistake. When baby learns to walk, he really does not walk. Rather, we ought to call it toddling.

It is a perfectly natural phenomenon to have his ankles bend under him, his knees somewhat wobbly, and his whole posture awry. However, this condition should not remain very long. After a few months, his step should become firmer and steadier and his body more and more upright.

This is but a transitory period and, unless overcome within a few months, mothers should suspect that something is wrong. Make allowances for infancy but watch out for defects.

SKIN EXAMINATION

Finally, we come to the observation of the most readily disease-susceptible structure of the body—the skin. Mothers should carefully watch the child's entire body to see that it is free from blemishes and skin eruptions.

Eight out of ten of the typical children's diseases will usually occur in association with skin eruption. Measles, scarlet fever, typhoid fever, and many other childhood fevers are always associated with skin eruptions.

At the first sign of a skin eruption, mothers should follow the necessary precautions of all fevers. The bowels should be washed, the child put to bed, and other children kept away. The diet should be of fruit juices and copious draughts of water. Watch for fever. If it is present, combat it by the means I have explained to you again and again.

This is an elemental summary. Mothers may, in a

larger sense, be better doctors than the doctors themselves. The problem is closer home.

Above all, mothers have the elemental interest in their little ones which doctors do not have—the love force of sacred motherhood. With this as a spurring motive, there is no greater incentive for mothers to learn to keep their children well.

CHAPTER XVII

PRELIMINARY SYMPTOMS OF SICKNESS

When babies and children get sick it is indeed a very difficult task to determine the nature of their ailment. Since most symptoms are subjective, that is, the patient alone is aware of their existence, the mother or doctor cannot determine the intensity or severity of the child's ailment.

Baby has no means of intelligent communication to describe his symptoms and discomforts. Hence the only means of recognition are by what we term objective symptoms, or by those signs which are discernible through physical examination or through intelligent observation.

"DOCTORITIS"

A few precautions should be understood by every mother. But please do not have "doctoritis," that is, a thoroughly developed doctor-reliance complex.

There is a certain pestiferous type of individual who hurries to the doctor with a tale of woe the moment the least particle of pain or discomfort develops. These individuals literally spend fortunes on imaginary ailments or ailments created by their diseased mentality.

Ailments of a purely minor character should be scrupulously let alone, permitting Nature to take its natural course, for, with scarcely an exception, they are self-limited and self-recuperative.

"But what is the line of demarcation?" mother will inevitably ask.

EXAMINATION HINTS

Here are a few simple hints:

If you notice that baby becomes listless, dull, apathetic, indifferent and with little or no appetite, place him under your keen and intelligent observation. Watch developments, for as yet there is nothing that merits the doctor's attention.

Two or three times a day look into the throat. If white spots or intense black areas are seen, be suspicious of a diphtheritic infection.

Morning and night, look over baby's entire body, watching for skin eruptions. If they occur, then one of several skin eruptive diseases may be present. Typhoid fever, scarlet fever, measles, chickenpox, smallpox and several others, are perhaps the most common.

TREATMENT OF VOMITING

If baby is retching and vomiting, he should be immediately placed under doctor's orders. If the doctor is of the newer school of thought, he will instantaneously stop all food, giving nothing but water or perhaps diluted fruit juice. Under most conditions, vomiting ought not to continue for more than sufficient time to thoroughly empty the stomach.

If baby develops convulsions, he should at once be placed under the professional care of a drugless practitioner.

If great difficulty of breathing occurs, denoting sharp pain or any other marked abnormality of breathing, always regard this as a more or less serious symptom.

One or more of these common symptoms will be encountered in the development of practically all diseases of children and infants.

CHAPTER XVIII

COMMUNICABLE DISEASES

"Whooping cough is in the neighborhood, doctor. What shall I do to protect baby?"

"My next door neighbor's child has typhoid fever. Will my baby also catch it?"

"Is it true, doctor, that all children must have measles and that I might just as well expose my baby to the disease now as at any other time?"

These and similar questions are constantly being propounded to every practitioner. "Catching" disease seems to be our understanding of communicability. That Mary caught it from Susie and Susie from Annie and so on.

The communicability or "catchability" of a disease is determined by more than the presence of a disease in a definite neighborhood.

It is true that countless examples will be given where a disease runs through an entire family. It is true that the susceptibility of members of one family is greater than the susceptibility of members of outside families, largely because the habits and the entire environment are usually the same within each family.

The fact that a next door neighbor's child has a disease is by no means sufficient warranty to presume that your child will get it.

We have two varied adaptations to the question of communicability. On the one hand, parents are obsessed with mortal fears and follow these fears to an extreme degree.

Not only the neighbor's children, but the neighbor's children's aunts, forty-second cousins, and associated cats and dogs are shunned as if they were lepers.

FEAR IS THE GREAT DESTROYER

The "germ-o-mania" is so deeply imbued in parents that if they could sterilize the very air their children breathe they would do so. Fear does more toward undermining the morale of their children than all the real dangers of contagion through contact.

On the other hand, we have those foolish, stupid parents who utterly disregard any sensible rules of preventive hygiene. They permit their children, not only to come in contact with other children who are suffering from acute infectious diseases, but pay no attention to the necessary preventive measures of ordinary cleanliness and hygiene.

PERSONAL CLEANLINESS IS VITAL

For instance, to use a handkerchief that performed service for a diphtheritic child is wrong from a sanitary and hygienic viewpoint. Whether you believe in the germ theory or not, there are certain techniques of cleanliness which ought to be obeyed by those who believe in drugless work, as well as by those who do not.

I personally saw a woman of a great deal of intelligence wash the healthy eye of a child with the same cloth that she used in washing a pus-filled infected eye. These are perhaps general illustrations of the disobedience of elemental laws of sanitation or hygiene. There is a sensible medium between the two extremes.

If your neighbor's child is down with an acute disease, don't become hysterical. Immunity from contagion lies in good health, not in inoculations. The theory of immunity by means of inoculations bears neither the sound logic of genuine science nor the stamp of intelligent reasoning.

When your neighbor's child or another child in the classroom is ill with a so-called communicable disease,

keep your child away from the diseased child. Then strive to build his health by means of proper diet and sensible care. But don't have him inoculated!

If mothers but understood the composition of the filthy nostrums and serums manufactured from diseased blood of diseased animals, they would not be so prone to trust such a system of therapeutics. They would then understand that we cannot overcome disease by filling the blood stream with more poisons.

Freedom from disease of any type is found only in internal cleanliness—blood cleanliness, not in the artificial injection of putrescent, decaying bacteria of diseased animal serums.

CHAPTER XIX

“SORE” THROAT—WHAT TO DO

There is scarcely any one of you who at one time or another has not had a sore throat.

The term itself is a sort of popular phrase used to imply almost any inflammation of the back part of the mouth.

In fact, anatomically speaking, there is no such thing as throat; the term is used only in a popular sense. Technically, what one has is a pharyngitis or, if the inflammation proceeds deeper, a laryngitis.

The pharynx is the opening leading into the esophagus, which, in turn, goes to the stomach.

The throat structures form the doorway to the digestive tube.

GERMS ARE AN EFFECT, NOT THE CAUSE OF THROAT INFLAMMATIONS

If you go to your medical doctor complaining of this inflammation, he will generally give you an antiseptic solution as a gargle. It is his belief that the inflammation has been caused by germs. His theory is that, when he kills the germs which are present, the inflammation will disappear.

Sometimes he is successful for the principal reason that by far the largest number of these inflammations run their course and heal of themselves. But there are a considerable number of cases where the inflammation persists and where antiseptics show no results.

Then what does he do?

Acting on the theory that his antiseptics cannot reach the germ colonies, he proceeds to destroy them by means of serums.

According to the germ theory, serums, in order to be effective, must be specific in nature. That is, each kind of germ must produce its own individual serum. Otherwise, it is scientifically inaccurate and theoretically useless.

Now here comes the joker in the pack which not one in fifty serum dopesters will recognize. Were I to take germ cultures from a thousand healthy throats, and from a thousand inflamed throats, I would find the germs of tuberculosis, malaria, pneumonia, influenza, catarrh, diphtheria, colitis, meningitis and myriads of other types of disease germs in both healthy and diseased throats.

Which germ is responsible for the sore throat? I do not know. The doctor who injects the serum does not know. The research workers who "discovered" the serum do not know. Yet the serum-squirters go merrily onward, making curable diseases incurable, polluting the clean blood with the unclean blood of diseased horses.

If people, at least, knew the unscientific and inaccurate nature of serum treatment, to say nothing of the evils of its manufacture and inoculation, we would have very much less of it.

If people knew but one-tenth as much concerning the ingredients which go into their bodies as they do of the materials with which they build their homes, we would have much less of these blood and germ mixtures.

As I stated before, most sore throats heal of themselves, spontaneously, but in those few cases where Nature must be assisted, do so in a rational manner.

STOP FEEDING THE GERMS

When the throat is inflamed, swallowing is difficult. The door to the digestive tube is closed. Nature does

not want more food to enter. She puts out an unwelcome sign. Heed it. Stop eating!

Wash out the bowels. Drink copiously of cool water with, perhaps, a little lemon juice added. Get out into the fresh air and use the lung power your Maker gave you. Straighten out those hunched-over shoulders. Push that abdomen in and breathe as you should. Get plenty of sleep—the greatest medicine in living nature. Bask in the sunshine and become imbued with some of its great life-giving wonders. Avoid, for a time, the nervous depletion of excesses.

These common-sense methods, if properly applied, will scarcely ever fail to cure the most obstinate of sore throat conditions.

CHAPTER XX

THE COMMON COLD

It seems that one can never say enough on the subject of the common cold.

The common, simple, uncomplicated cold should not be treated as a pathological process. Rather should we consider it as a function of elimination. In spite of its distressing symptoms, we should welcome the purification process of internal cleanliness usually induced when a cold occurs.

SYMPTOMS

The same essential physiological changes occur in the child as in the adult excepting, perhaps, that the symptoms are more acute and of a more sudden onset.

As in the adult, we find fever, running of the nose, coated tongue, lack of appetite, irritability, crossness, a stuffed-up sensation of the nostrils which makes breathing difficult, and a general lassitude which is always characteristic of cleansing crises such as this.

TREATMENT

In the elucidation of principles governing a cold, I stated that the first cardinal rule is the fast or semifast. With children we have a genuine problem in this respect.

When the cold is not severe, it is indeed very difficult to place baby on a complete fast. However, when the symptoms are severe and acute, he will shun food of his own accord.

There are a number of ways in which we may reduce baby's food intake. If he is nursing, instead of giving him the customary fifteen or twenty minute nursing,

permit him to have but four, five or six minutes. Just prior to the nursing, let him have all the water he will take. Fruit juices should largely substitute for milk at this time.

If he is on a formula, the dilution of water should be materially increased. If he is accustomed to have his milk diluted with one-third water, change to two-thirds water and one-third milk. If he is on solid food, say, for instance, the diet of the young child from a year and a half upward, place him on fruit juices and fruit exclusively.

The general principle throughout, whether he be breast-fed, fed on a formula, or on solid food, is to sharply reduce the food intake and, if possible, to confine him exclusively to liquids.

You see that the first essential process in combatting the ordinary common cold is to decrease the quantity of food that baby should take. That is, since we understand the common cold to be a program of body elimination, we should assist this program by no longer loading the body with any food which will create a drain on the eliminative organs. Eliminations must be assisted—not retarded.

To this end a number of other measures are also applicable.

METHODS OF ELIMINATION

The body has four great house-cleaning departments, the skin, the intestines, the kidneys, and the lungs. These four health-assisting agencies should be aided so that they can function to the maximum of their natural capacity.

The colon should be cleansed so that all putrid waste is removed at least twice per day. Do not do this by means of cathartics or purgatives. It is necessary to cleanse only the last four or five inches of the digestive system.

Castor oil, epsom salts, or the host of other laxatives used for children are vicious and unnecessary. The simple water enema with plain water will serve the purpose far more admirably without any of the injurious consequences that inevitably result from the use of drugs.

Enemas should be given throughout the entire siege during which the acute symptoms of the cold are manifest.

If fever is present, the most effective method of keeping it under control is by means of hydrotherapy. The application of a few cold water packs, applied on the abdomen, will be more effective in keeping a fever under control than all the drugs known in the pharmacopæia. Warm or tepid baths serve admirably to keep the skin open and the pores discharging their quota of waste.

Mother should clearly understand that the simple, common cold is, of itself, not dangerous. It is only when Nature's eliminative process is complicated by medicines or by other attempts at suppressing her efforts that serious consequences result.

THE COUGH AND ITS TREATMENT

The distressing feature of most colds is usually found in the paroxysm of coughing which so often accompanies them. To alleviate this cough, far too often, mother's first thought is to give baby an anti-cough medicine.

If she but understood the effects of the depressing drugs of which most cough medicines are made, she would hesitate again and again before resorting to such measures.

Cough medicines do not cure coughs. They merely suppress or deaden the nerves governing the structures involved in the coughing process. Many of these anti-

cough drugs contain strong opiates or derivatives of opium coming under the group of narcotics.

Expose the child to ample quantities of fresh air. That is to say, every window in his bedroom should be opened wide. Keep his body warm, if necessary, by the use of hot water bottles to the abdomen and feet. Give him warm liquids. Clean him out internally.

In practically every uncomplicated case, these measures if continued for a very short time, would be sufficient to overcome, not only the common cold itself, but also the paroxysms of coughing.

It is not the things we don't do, but rather the things we do do, that so often lead to serious complications of the common cold.

HYGIENE DURING THE COLD

The contagious and infectious nature of the common cold has been well demonstrated. It should be treated like any other communicable disease. The child affected with it should be kept isolated from other children; not necessarily in strict quarantine, but, at least, reasonably separated.

The common cold, like almost every other disease, has both ebb and flux in its symptoms. In practically every case it is marked by decided mucous elimination. The nose, the mouth and sometimes the ears, discharge a liberal quantity of mucous. Children are wont to swallow this excretory material. If possible, mother should instruct the child to expectorate this mucous waste.

Instead of attempting to stop the eliminative process by means of medication, mothers should welcome the internal house-cleaning which this form of cold guarantees.

The more mucous waste discharged, the better the child will be.

THE REMOVAL OF TONSILS CANNOT "CURE" COLDS

One peculiar phenomenon is almost always manifested when a child is suffering from the common cold; the throat and especially the tonsils and glands of the neck become swollen, enlarged and inflamed. It is at this period that far too many mothers decide that baby's tonsils should be surgically removed.

They could make no greater mistake than this, for at few other times is Nature making such an heroic attempt to discharge the pus and putrid material lodged in the tonsils.

Though the tonsils may seem enlarged and inflamed during the cold, if mothers will carefully observe, they will always note that from one to three months after a cold, the child is in better health than ever before and the tonsils are proportionately reduced.

In fact, in very many cases, colds are the means by which the tonsils are prevented from growing to too great a size.

While speaking of tonsils, let me reiterate that, during childhood, the tonsils have a decided value. They are the protectors against throat infection. Mothers should hesitate decidedly before permitting their removal. Even though they be charged with pus, no doctor will contend that the tonsils manufacture this excreta. They act merely as a secretory pocket while the blood itself manufactures the pus.

By removing the tonsils, the chamber in which this waste is lodged, we do not get at the source from which the pus is manufactured.

Consequently, we should treat enlarged tonsils by means of corrective diet and thus get at the cause by cleansing the blood circulation.

It is high time that mothers looked upon the cold from an entirely different attitude than at present. In-

stead of treating it as a disease pathological process, rather should we consider it as an eliminative crisis necessary to cleanse the body of its morbid wastes. As such we should assist in the eliminative process as best we can.

CHAPTER XXI

COLDS AND TONSILLITIS

Modern medical theory believes that colds are due to the infective nature of definite germs. The belief is that these germs are sprayed through the mouth secretions from one individual to another and, that if one is susceptible, the mere contact of these germs is sufficient to induce a cold.

A great deal of experience has convinced keen observers that the process of the cold has a direct bearing and relationship with the condition of the tonsils. It has been noted that invariably the tonsils are red, angry and swollen at the time of a cold. As far as can be ascertained they bear the brunt and the burden of the bacterial attack of the cold-producing bacteria.

ENLARGED TONSILS ARE AN EFFECT OF DISEASE, NOT A CAUSE

When the surgeon looks at tonsils at this stage he says that they are diseased and should be surgically removed. He points to the bacterial infection as the cause and states that the removal of the tonsil will stop the infiltration of the bacteria into the circulation.

The surgeon believes that he can stop and prevent colds by the removal of these inflamed, infected tonsils. The result is that conservative estimation places 50 per cent of our juvenile population as having had their tonsils removed.

We, of the drugless school, believe that this is an atrocious crime against the health and welfare of children. A study of the physiological action of tonsils, a knowledge of disease processes, will readily affirm these contentions.

THE FUNCTION OF THE TONSILS

The tonsils are structures technically known as lymph nodes. That is, they manufacture the white cells of the blood stream. These white cells are supposed to be the scavengers preying upon bacteria and upon other foreign substances entering the body. Figuratively speaking, they manufacture the soldiers of the blood and are the devourers and destroyers of infective bacteria.

We are waging a ceaseless, eternal battle with our bacteria foes. When we die, they emerge as victors; when we become diseased, they win partial victory.

Since the tonsils manufacture the soldiers of the body, is it not the height of absurdity to destroy the body defenses merely because, in their efforts to protect us, the enemy germs have invaded the stronghold of protection?

The tonsils, four or more in number, differing with each case, stand like stalwart pillars, protecting the throat against the eternal onslaught of disease bacteria. Because they bear the brunt of the battle, the surgeon orders their removal.

THEIR REMOVAL IS ALWAYS DISASTROUS

Experience also teaches bitter lessons. Case history after case history has been compiled showing an inevitable train of colds and coughs, with more serious infections that follow the removal of the tonsils. It is because the bacteria now have relatively free entrance.

If there is any one factor which will produce constant colds and other bacterial infections, if there is one element which is conducive to lessening the resistance of the respiratory tract against infection, that one thing is—the surgical removal of the tonsils.

CHAPTER XXII

WHEN BABY "CATCHES" COLD

Babies will "catch cold" whether they be nursed or artificially fed. They are much more prone to colds when artificially fed than when nursing, although do not, for a moment, believe that the mere fact of their nursing prevents their catching colds.

Whether baby be artificially fed or whether he be nursed, the cause of the cold is the same. It is impossible to "catch a cold" unless one is susceptible.

This susceptibility is measured in terms of decreased resistance and of lowered vitality. In turn this decreased resistance and lowered vitality, in almost every case, is caused by that everlasting eternally feminine instinct of overfeeding.

With scarcely an exception the responsibility for baby's cold lies with mother. She has either continuously overfed or overnursed baby until his digestive system is thoroughly loaded with toxic wastes seeking an exit.

You will recall that in other chapters I stated that a cold is Nature's splendid eliminative process; that wastes are seeking a means of getting outside of the body.

The same holds true with baby's other functions. The wastes come from baby's nose or through bad breath, or through extra foul waste from the bowels and kidneys.

If baby is nursing, sometimes the cold is the physical reflection of the mother's cold. The best way I can illustrate this is by saying that each milk cell which baby takes is a physical, mental and temperamental picture

of the mother at the time baby is fed. If the mother's vitality is low, the milk cell's vitality is correspondingly low and hence baby becomes susceptible to her cold.

TOXEMIA CAUSES COLD

You will note that I emphasize continuously that the background of a cold is toxemia. You will note that I pay very little attention to the things most people attribute as being responsible for the cold. I have ignored the fact that someone else in the family had a cold and baby "caught it." I have ignored the draft which mother is sure chilled baby. I have ignored his wet feet which he got when crawling on the lawn. I have ignored the fact that a strong breeze struck him on the chest when he went driving with daddy.

All these are but incidental causes. Thousands of babies get wet feet, are subject to drafts, have cold breezes strike them, and are chilled in different parts of their body. Everyone is exposed to the germs that are found in the typical cold.

Yet, why is it that all babies do not "catch cold"?

If ten thousand babies were subjected to similar conditions, perhaps no more than forty or fifty would "catch the cold." If like cause produces like effect, then all drafts, all chills, all germ exposures produce a cold.

But we know this is not so.

HOW TO OVERCOME THE COLD

However, irrespective of the theory of its cause (and no two doctors or schools of healing agree), the thing of paramount importance to mother is how to quickly overcome baby's cold without complications.

Before I give you some general laws governing this, I want to again reiterate a statement whose importance I wish I could sear into the brain of every mother. It

is this: The unmedicated cold that is not interfered with from any standpoint will seldom, if ever, lead into more serious diseases such as pneumonia, tuberculosis, asthma or chronic bronchitis.

It is only when we use drugs or take other "preventative" measures, it is only when we drive the toxic wastes deeper into the tissues, that we produce these more serious diseases.

Hence from this generalization we may draw our next logical deduction: Ninety per cent of all colds will cure themselves spontaneously if we but let well enough alone. That is to say, most mild, uncomplicated colds, unaccompanied with high fever, should be ignored.

Those few colds, remaining in other classifications, will generally heal themselves if we but cut down on baby's dietetic ration.

For instance, if baby nurses for twenty minutes, reduce the nursing to ten minutes for a day or two. If he is fed artificially, merely reduce the total quantity of his feeding.

If fever results, a cold pack applied over baby's abdomen for thirty to forty-five seconds four or five times per day in a warm room will generally extract sufficient heat to bring the fever within easy control.

If this fever is but one or two degrees above normal, it should not be interfered with at all. A slight fever of this kind will do only good. The large quantities of waste material that it burns up in the form of toxic gases inevitably results in baby's betterment.

These are but a few simple principles to be applied in the uncomplicated cold that so frequently attacks baby.

CHAPTER XXIII

NASAL DISCHARGES

It is a peculiar fact of Nature's reactions that one of the first evidences of an overfed system is shown by nasal discharges.

This form of elimination constitutes such a common symptom and is of such frequent occurrence, not only in baby's life, but in the lives of his elders, that it assumes quite an importance.

The "do something" mania has the great majority of mothers in its control.

"Baby's nose is running! What shall I do?" This is repeatedly presented to me as well as to every other physician.

The only sensible reply that I can give is: "Do you want the excreta which is seeking to escape to remain inside his body?" If the mother ponders a bit, her answer is inevitably in the negative.

The substance, being discharged, is a mixture of mucous and pus, degenerated cells and bacteria. Surely one does not want this accumulated debris to remain in the system.

It is exceedingly difficult for many people to understand that the "running nose" is the safety valve against more serious infectious diseases.

GERMS THRIVE ON TOXIC WASTES

Germes must live. They must have food on which to thrive. This accumulated mucous and pus constitutes bacterial food. Where there is no accumulation there can be no infection.

This law holds true in the same sense as "where there is no filth, there can be no flies."

If Nature attempts to clean baby's body by the discharge of accumulated filth, assist that process and be thankful that it occurs.

It is true that, perhaps, baby is cross and irritable while it occurs. This happens in any "house-cleaning" process. The energies of the body are devoted toward purification instead of toward normal function.

DRUGS DRIVE THE NASAL EXCRETA BACK INTO THE SYSTEM

The medicine route so commonly and so foolishly resorted to by many mothers does nothing but suppress the pus and the mucous seeking to escape.

It is true that certain drugs will stop the "cold" associated with nasal discharges. But it is accomplished by depressing the nerves governing the organs of elimination, or by retarding the activity of the eliminative processes.

If a baby patient goes to the medical physician, without doubt, "results" will be obtained in a quicker time than if he goes to the drugless physician. Suppression is quicker than elimination.

Mothers find it somewhat difficult to coherently piece together baby's series of suppressed colds and the sharp crisis in disease that occurs after the suppression.

These colds may be driven back into the system again and again, but sooner or later enough of the body wastes will have accumulated to create a fertile environment for bacterial development—then, presto!—the acute, infectious disease such as typhoid, diphtheria, pneumonia or some other such ailment.

What, however, should be the sensible procedure when baby's respiratory and nasal organs discharge waste?

First and foremost, do not become "doctorphobic."

If a chemical prescription is resorted to, the result cannot be anything but injurious to baby.

TREATMENT OF NASAL DISCHARGE

The simple, uncomplicated cold with "running nose," please let alone. It would be better to enforce a rigid "do nothing" than the usual "do something" program.

In practically every case, a cold of this kind heals spontaneously of its own accord, without assistance, and above all, without the complications or after-effects so frequently encountered.

A number of common-sense measures, however, do present themselves. No "cold" can occur unless there has been both overfeeding and wrong feeding.

Since the nasal discharges are Nature's effort to get rid of the waste materials, we most assuredly ought not to place more wastes in the body. That is, stop feeding altogether for from twelve to forty-eight hours, at least. If this is impractical, reduce the feeding markedly.

If baby is on a milk diet, double or triple the water dilutions of his bottle. If he be older and is fed on solid foods, place him on fruit juices or on a watery fruit diet for several days.

If the intestines are clogged, clean them out with water flushings. Let baby have plenty of sleep and little excitement.

These measures are virtually all that are necessary in the simple, uncomplicated type of cold and of nasal discharge.

CHAPTER XXIV

THE FUNCTION OF TONSILS

There is scarcely a mother who, at some period or other of the school year, does not receive a note from one of the all-wise, all-intelligent, all-knowing, thoroughly officious school nurses that her children's tonsils and adenoids must come out.

Some time ago one of my students wanted to get some data as to the extent of tonsilar and adenoid trouble in the schools. He had a meeting of about 110 boys of the seventh, eighth and ninth grades, ranging in age from about 10 to 15. He asked all those who had had their tonsils and adenoids removed to raise their hands. Sixty-one did so.

Imagine such a terrible condition of American childhood. You may see from this that I am presenting a somewhat popular question. Hardly a day goes by but that a mother, or several of them, do not offer me this problem for solution.

In most cases my reply is terse and to the point: "Put your child on a fruit diet for a week or ten days. He will then 'catch cold' and his tonsils and adenoids will be sharply reduced."

Invariably the mother looks at me quizzically and asks, "Well, do you want him to catch a cold?" She cannot understand it when I reply that I most assuredly do. Some of them say that I am a very funny doctor because I wish my patients to catch a cold.

A "COLD" IS NATURE'S EFFORT AT ACUTE ELIMINATION

It is not until I explain our philosophy of a cold that the dawn of comprehension comes.

What takes place during a cold? The nose runs—mucous poison is being discharged. The breath is bad—gas poisons are being eliminated. A slight fever takes place—poisonous wastes are being burnt up. The urine is strong and irritant—the kidneys are doing their bit. The bowel substance is profuse and foul—the intestines are lending a hand. The skin frequently has a disagreeable odor and has eruptions—the great evaporating power of the skin is helping.

Summing up, what is a cold? Nature's grand, splendid effort toward general house-cleaning from virtually every department capable of cleaning house.

I have written again and again that a clean internal body cannot get sick. The cold is one of the greatest cleansing agents we have.

ENLARGED TONSILS ARE OVERWORKED LYMPH GLANDS

Now, what are enlarged tonsils? Nothing but the accumulation of wastes in the lymphatic system. The tonsils and adenoids are lymph glands manufacturing a vital secretion of the body. They are our protection—the soldiers against bacterial infection. It is only when they are overworked that they become enlarged and inflamed. Give them less work to do and they will reduce.

Mothers who read this—the cold is Nature's great safeguard. Those of you who reduce your child's tonsils by a short fruit diet for a week or ten days, when the cold inevitably comes—know what it is.

CHAPTER XXV

MOUTH BREATHING

It is not very long in baby's career before mother begins to notice some of his defects, hereditary and acquired. Among many others, she will very frequently observe that baby keeps his mouth open while he is asleep and, to a considerable extent, even while he is awake.

Mouth breathing is not a normal, natural method of breathing. Nature intended us to breathe through the nose, for in the mucous lining of the nose we have the filtering system which prevents the entrance of considerable quantities of dust and innumerable bacteria.

Lining the nasal passages we have a number of tiny little hair-like structures, technically known as cilia. These hair-like appendages perform a wave-like motion. They catch the dust and bacteria particles and, by reason of their forward motion, tend to discharge the impure substances accumulated in breathing.

These discharges are manifest in the form of baby's regular nasal discharges. They are laden with bacteria and the ordinary dust found in the air.

Now, when baby becomes a mouth-breather, this defensive organization, so wonderfully constructed, is to a considerable extent, not permitted to function.

The air entering baby's lungs is not purified and consequently he is often subject to colds. Since a cold is nothing more than Nature's effort to discharge accumulated morbid waste material, we can readily see that if we prevent this waste material entering baby's lungs, colds will become less frequent and baby's resistance to them much better.

CAUSES OF MOUTH BREATHING

The causes of mouth breathing are varied and many. Chief among them are enlarged tonsils and adenoids obstructing the nasal and respiratory passages so as to force baby to resort to mouth breathing in order to secure the necessary quantity of oxygen.

THE IMPORTANCE OF THE TONSILS

Far too many people believe that tonsils are functionless tissue, a sort of unnecessary surplus in Nature's divine creation. It is this view—that the tonsils are a useless structure—which has induced so many mothers to permit their children to be operated upon.

The tonsils are lymph nodes, a tissue which manufactures the white corpuscles of the blood. The faucial tonsils of the mouth are the largest white cell manufacturers in the body.

It is a fact in physiology that when the blood becomes thoroughly laden with the morbid waste materials of poor elimination, the body must manufacture an increased supply of white corpuscles in order to dispose of the waste.

The white corpuscles manufactured by the tonsils and adenoids are really the scavengers of the body, the vitally necessary agents for internal purification. They are the blood stream's best protective agents.

When we surgically remove the tonsils and thereby destroy the factory where these protective white corpuscles are manufactured, we immensely weaken the resistance of the body, especially the respiratory system.

The tonsils stand like guarding sentinels at the entrance of the throat, and when they are destroyed, the infecting bacteria have a free and easy entrance. It is for this reason that, after the removal of tonsils, the child is so often prone to lung diseases, both mild and severe, chronic and acute.

When baby breathes through his mouth because of enlarged tonsils, the sensible procedure is to ascertain what elements in his diet have produced the inflammation. In most cases it will be due to the excessive consumption of cereals and milk.

Both cereals and milk are vital ingredients in a normal baby's dietary, but mothers are far too prone to overfeed. In almost every case a reduction in these two dietetic items and an increase in the fresh fruits will reduce baby's tonsils.

Adenoids are similar to tonsils except that they are smaller and occasionally more numerous. Adenoids are also lymph nodes manufacturing white corpuscles. They become inflamed when baby becomes constipated or is fed excessively. His blood stream becomes charged with wastes. Like tonsils, they should also be treated dietetically. They will respond in the same fashion.

These two are the leading causes responsible for mouth breathing. Occasionally, however, we find neither of these complications, yet baby breathes through his mouth.

SOMETIMES IT IS MERELY HABIT

Sometimes it is that baby has become adapted to a bad habit. He keeps his mouth open during the day and retains the custom at night. Mother should watch this carefully. While he is asleep she should close his lips several times each evening and observe if breathing becomes more difficult or laborious.

If baby can breathe just as well through the nose as through the mouth, the chances are that it is merely a bad habit.

In older children this habit may be decidedly pronounced, even to the extent of a complete dropping of the jaw. In such cases, not only is verbal correction

necessary during the daytime hours, but sometimes it becomes necessary to bandage a child's jaw with a large handkerchief so as to keep it closed mechanically.

After several nights of this procedure his jaws will probably remain shut of themselves.

OTHER CAUSES

There are still other causes that mother should ascertain. Sometimes irritation, due to intestinal worms, will force baby to become a mouth-breather or to keep his mouth wide open. Sometimes a highly neurotic, keenly sensitized condition, coupled with considerable excitement during his play, will do it. Sometimes mother's foolish and stupid over-stuffing, because she likes to indulge baby, will be responsible for it. Sometimes chronic constipation will induce it. In a few cases, restless sleep with its corresponding unrest, will bring it on.

It is up to the mother to study her child to ascertain what condition is responsible for his mouth breathing. Get at the cause and, once discovered, seek to overcome it. This is a much more constructive method than to remove baby's tonsils, perhaps mutilating him for life, and possibly endangering his hearing and tremendously shocking his nervous system.

An ounce of prevention will save a ton of regrets as well as many dollars, foolishly spent for drugs, in the vain pursuit of health for baby.

CHAPTER XXVI

COUGH MEDICINES

From baby's early infancy and throughout childhood, diseases of the respiratory system are common and plentiful.

A typical case history, with hardly an exception, shows such ailments as whooping cough, common colds, bronchitis or even more serious diseases as pneumonia, pleurisy, asthma and tuberculosis included in the history of almost every child.

We are not so much concerned as to why these diseases should be. What is of more importance is our action and treatment of these ailments when they appear, for appear they will, whether we like it or not.

TOXEMIA CAUSES LUNG DISEASES

The respiratory diseases, whether we speak of the common cold or influenza or pneumonia, all have a common origin, namely the toxic accumulation of morbid debris due to wrong and excessive feeding. Perhaps many of you may be tired of my everlasting hammering at this same question, but since it constitutes the cause for most of the ailments of childhood and adult life, too much cannot be said about it. The proof is self-evident.

There is not a respiratory disease of any nature in which the body does not make every effort to discharge the morbid accumulation of toxic wastes. In the common cold, the nose runs. Poison is being excreted. Fever is sometimes present as body debris is being burnt up. The tongue is coated and the breath is bad. The lungs are attempting to discharge their effete material.

The urine is strong and has a characteristic ammoniac odor as the kidneys try to do their bit.

In short the cold is the acute crisis of the tiny body attempting to get rid of some of the wastes of a clogged eliminative system. Instead of understanding it as such, far too many mothers resort to the stupid process of repressing a cold by means of cough medicines and of various kinds of drugs and patented remedies.

The mere fact that baby is discharging large quantities of mucous excreta creates a hysteria in many mothers that does not rest until the symptoms have subsided. They become unduly alarmed and are not content until they have rushed baby to the doctor and he has properly prescribed the necessary suppressing agent to prevent Nature's normal processes.

COUGH MEDICINES SUPPRESS AND COMPLICATE THE DISEASE

If mothers knew the injurious action of most of the chemical compounds used in the prescription blank and in the commercial patent medicines that treat the typical cough or cold they would be less anxious to resort to these means.

Most of the cough medicines have a base of the coal-tar derivatives—strong drugs which act on the nervous system by depressing normal activity. Of course it is an easy matter to “kill a cough” by taking a drug which will almost paralyze the nerves leading to the muscles involved in coughing, but is it wise? The cough that is present in the usual cold consists of a spasmodic contraction of the diaphragm and chest muscles in their effort to dislodge the by-products of lung congestion and inflammation, principally mucus pus, bacteria and decomposed, decaying cells.

If the coughing is suppressed, the morbid wastes,

seeking to escape, have no outlet and remain more or less permanently in the lungs.

It is not such a difficult matter to trace the origin of serious ailments of the lungs to a simple cough or cold treated via cough medicine.

The usual history generally starts with a simple cough suppressed by drugs, then an acute attack such as influenza or bronchitis which is again suppressed, and finally the more serious complications of asthma or tuberculosis.

The running nose and phlegm discharged from the mouth are very often the safety valves which safeguard the child from the more serious and less curable ailments.

If Nature wishes to rid herself of this body excreta, why in the name of common sense should mothers seek to thwart Nature's normal expression by forcing the body to retain its debris?

NATURE'S EFFORTS SHOULD BE ASSISTED, NOT HINDERED

Instead of cough medicines mothers who are compelled to handle this problem should assist Nature's attempt at normal elimination. First and foremost, either stop feeding entirely or sharply curtail the quantity of food. Eliminate all the heavier foods such as cereals, milk, eggs and, of course, all carcass food from the dietary.

As soon as baby shows the first signs of a cold or a cough, restrict his diet sharply, preferably by the use of fruit juices and the watery fruits such as oranges, tomatoes, grapes, melons and others.

Assist elimination through the skin. Often several warm baths will open the pores, if followed by friction rubs in which the blood is brought to the surface of the skin.

The bowels should be thoroughly cleansed by repeated enemas of clean tepid water until the last syringeful comes out clean.

If the temperature rises and goes beyond two degrees above normal, the application of cold hydrotherapy will control it and, at the same time, assist in the elimination.

These measures, with an ample quantity of sleep and relaxation, are usually all that are necessary in the treatment of the common cold and are vastly more efficient than cough medicines or drugs, irrespective of how high the healing claims of the latter may be lauded.

CHAPTER XXVII

PNEUMONIA

When colds are very common and other respiratory inflammations attack children so readily, pneumonia is a disease feared by every mother.

During infancy respiratory diseases of every kind and type carry off more children than all other ailments combined. This is largely true because most other diseases furnish an adequate background in the form of a lessened resistance, which, in turn, readily creates a susceptible environment for the development of such acute lung diseases as pneumonia. That is to say, a child whose resistance is tremendously lowered by means of poor diet and of faulty elimination, will be much more readily disposed toward pneumonia than a child whose general health has been well kept up.

With the horrible fear that pervades mothers in their constant suspicion of pneumonia, they ought to know something about it.

There are two distinct types of pneumonia, called, technically, bronchial pneumonia or the kind which affects the bronchial tubes almost exclusively, and lobar pneumonia, which in reality, affects the tiny air sacs that constitute the breathing portion of the lungs.

These fine differentiations are of secondary importance to the mother. The general recognition of the disease is by far more important. Of the two types, bronchial pneumonia is found in the majority of cases.

Under medical treatment infant mortality is exceedingly high. Statistics show that, during the first year, bronchial pneumonia has a 53 per cent mortality. During the second year, 33 per cent, during the third year, 11 per cent and thus on down. Mortality statistics also

show that more than 70 per cent of all pneumonia occurs during the colder months, autumn, winter and spring.

Unfortunately, it is oftentimes difficult to recognize the oncoming of this disease. Frequently the symptoms are few, difficult to recognize, and exceedingly irregular. The entire duration of symptoms may be as little as twenty-four hours, while, on the other hand, they may go on for ten days or two weeks.

However, high temperatures generally, 104 degrees and up, associated with extreme prostration where the child evidences almost no signs of life-energy, rapid respiration, approximately between sixty and eighty per minute, with some cyanosis or bluish, pale discoloration, may constitute the leading symptoms.

There are other signs which the physician may recognize by means of his stethoscope.

In children beyond four or five years of age the acute type of pneumonia is rarely found. After this age the disease runs a longer course. It has a few additional symptoms which make it somewhat easier to recognize.

In both types the fever is usually high, sometimes with considerable fluctuation and gradations. The prostration is not nearly so great and is much more gradual in coming. A cough is usually present, sometimes in spasms and paroxysms, and sometimes it is almost incessant. As a rule a patient is better off with a strong cough than with a weak one, as it permits of a freer expectoration of the accumulated mucus.

Difficult breathing and cyanosis will also be present in this type of pneumonia. Digestive symptoms may be acute, such as vomiting, diarrhoea, gas distention and belching.

There are many other fine points in the recognition of pneumonia, such as blood counts and stethoscope

information; but these are of little practical value to mothers.

Briefly, if your child becomes stricken with an exceedingly high fever, marked prostration, rapid and difficult breathing, paleness and cyanosis, then suspect pneumonia. The thing of primary concern to mothers, however, is the everlasting important question, "What is to be done?"

TREATMENT DURING PNEUMONIA

All cases of pneumonia should be carefully isolated. Other children should not be permitted in the room. All quarantine precautions should be followed. The body excreta should be burned. Rigid antiseptic conditions should prevail.

As in all other respiratory diseases, fresh air, all that you can get of it, is vitally essential. Of course, in colder climates a child with pneumonia should not be exposed to below-zero temperature.

In California, however, no such conditions prevail, and every case of pneumonia should rest either on the sleeping porch or at least with every window wide open. Older children must be kept in bed, while tiny infants may be held in the mother's arms so that a frequent change of position is permissible.

Positive measures to counteract the fever should not be taken unless it mounts beyond 104 degrees. Under no circumstances should drugs be given, especially those which are commonly used in pneumonia cases.

The use of coal-tar products should be rigidly forbidden. In the reduction of temperature accomplished by their means, the prostration is markedly increased. At this time the child needs every atom of strength and should be robbed of none of it by the use of vicious, anti-fever drugs.

If the temperature mounts beyond this point, the usual sensible measures of reduction should be applied. A tepid sponge bath, or the administration of cold water compresses to the abdomen will usually be all that are necessary to bring the fever within the bounds of safety.

As in all other diseases the digestive system should be thoroughly cleansed by the use of repeated enemas and emphatically not by means of purgative drugs.

The irritating effect of laxatives often does much greater harm than any benefit that may be secured from their bowel-cleansing effects.

Cool water should be given as frequently as the child will take it. Under four years of age, eight ounces every two hours will be quite suitable. Beyond that, at least eight ounces an hour.

During the acute onset, there is no necessity for food. If the child craves nutrition of some sort, pure, unseasoned vegetable broths and fruit juices are all that are necessary for the first few days.

Do not for a moment imagine that nutrition creates strength under such conditions. The ability of the body to recover is determined, not by the quantity of food put in, but rather by the ability of the body to cleanse itself.

The digestive system, together with the lungs, should be given every opportunity for disposing of its morbid waste.

THE CONVALESCENT PERIOD

The treatment of the convalescent period following pneumonia is also of tremendous importance. It is this phase which determines whether the child makes a complete recovery or will gradually drift into tuberculosis.

The serious mistake made by most mothers during

convalescence is the stupid attempt toward "feeding plenty of good nourishing food, in order to make up for the weight and strength lost during pneumonia."

The result is that a new congestion takes place. The lungs, being in an already enfeebled condition, become a ready prey to the ravages of tuberculosis.

Almost as important as proper nutrition is the question of climate. The child should be moved to a warm, mild climate such as is present in Southern California practically throughout the year.

In this respect, the people of the Southwest are more blessed than any other area of the United States, for they undoubtedly have a better climate and one more suitable for the recovery of respiratory diseases than any other section.

Pneumonia, treated properly, need not have the terrors at present associated with it.

CHAPTER XXVIII

TUBERCULOSIS IN CHILDREN

More and more, rational methods are being used in the treatment of tuberculosis. Gone are the days when the tubercular child was given up as dead once the diagnosis was definitely established.

The problem of tuberculosis in children is a genuinely serious one, as the factors inducing it are constantly present.

We find many explanations for the presence of tuberculosis, some of which may be so and some not. It is not so much theory that we are concerned with, as facts. Whether we believe the disease is contagious and infectious, due to the transmission of the germ from one person to another, or not, is more or less beside the issue.

The main problem revolves about prevention and methods of treatment. Most authorities are agreed that it is a relative question of immunity and resistance.

A number of things play their part in producing this resistance. If the parents are healthy, vigorous and strong, the child is blessed with a strong hereditary resistance.

It is not so much a question of sterilization against germs. Germs are omnipresent, everywhere, all the time. We can scrape from almost any healthy throat the germs of several virulent diseases. Yet the disease may not be present.

It is rather in the environment inside the body, capable of fostering, growing and developing the disease bacteria that we must seek for the solution and for the prevention of disease.

A HEALTHY ENVIRONMENT IS THE BEST PREVENTATIVE

Thus it is with tuberculosis. Strive toward maintaining the general systemic health and the bacteria will well take care of themselves. Their presence then is not dangerous nor inimical to health.

There are a number of elements entering into the production of this state of health so necessary for resistance against tuberculosis.

A CHILD WHO IS NURSED HAS A BETTER RESISTANCE THAN ONE WHO IS NOT

It is deplorable to see the high percentage of mothers who cannot or do not nurse their little ones.

Notwithstanding the loud-voiced claims of every patented infants' food; notwithstanding the high degree of efficiency with which dairy milk is produced, one fact must stand pre-eminent in the consciousness of all mothers—there is no substitute for healthy mother's milk.

All artificial formulas are, at the best, but a very poor second to the milk of the child's own mother.

Every authority on child health is continuously stressing this all-important feature. Mothers, nurse your babies!

The greater problem in this respect is the inability of mothers to perform this necessary physiological function, largely due to their own impaired health. When a woman is about to become a mother, it is her sacred duty to bring her own health to the highest maximum of efficiency.

This may be done by obedience to a number of rules of hygiene and diet. Good, fresh food, including plenty of fruits, vegetables, nuts, whole-grain bread-stuffs, and a limited supply of dairy products, are essential toward the maintenance of the health.

There should be no excesses of a dietetic, nervous or other variety. The chances are very much better for a healthy mother to nurse her young than for one who is constantly sick and ailing.

THE MORTALITY OF ARTIFICIALLY FED INFANTS IS HIGH

All these facts are born out by the mortality statistics. Of all the children who die under the age of one year, it is shown that well over ninety per cent of them are either entirely or partly artificially fed.

The very low mortality of breast-fed infants is of itself the best claim for its superiority. In this realm, as well as in most of the other aspects in care of the child, do we find the prevention of tuberculosis.

However, when once an infection has started, there is still no reason, whatsoever, why complete recovery cannot be achieved.

FRESH AIR AND SUNSHINE—SPECIFICS

As we understand the disease, more and more we are coming to recognize that fresh air and sunshine are almost specifics in both the prevention and in the cure of this dread disease. It is not even sufficient to have the child sleep in a room with windows wide open—better yet, have him sleep outdoors.

A simple cot, with an awning protection above, easily built by any carpenter, will give baby ideal provision for his sleeping hours.

Exposure to the antiseptic germ destroyer, yet life-maintaining precious rays of the sun, is just as important. Bacteria cannot live in sunshine. They are essentially a product of darkness, of crowded rooms, of filthy conditions.

A child kept out of doors twenty-four hours a day has a tenfold better opportunity to recover from tubercu-

losis than one who is kept coddled, softened and seemingly protected from exposure.

DRUGS AND SERUMS CANNOT CURE

There is no drug, serum, pill, tonic or tablet which has been efficacious in the slightest degree toward the cure of tuberculosis. The problem of its treatment is essentially one of natural methods. Drugs can do naught but weaken the resistance, lower the vitality, and complicate the problem.

SYMPTOMS

There are several types of tuberculosis which commonly affect children. In almost every case we find a marked similarity of symptoms and signs.

There is a gradual wasting. The child becomes anemic and listless. Sometimes the cough is present with fever. Sometimes it is not.

Usually marked digestive disturbances accompany the disease. Sometimes night sweats are present. Sometimes no other sign than an increased inertia and listlessness will mark its presence.

In almost every case the full development of the disease will be preceded by a very common symptom of childhood—the thickening, enlargement and sometimes pain in the glands of the neck. These may be felt as small pea-like structures on either side of the neck.

Tuberculosis in children as contrasted with the adult type is relatively of a more hasty variety. Either the child succumbs within a fairly brief time or gets well in almost as quick a time. It is seldom one sees the disease extending over ten, fifteen or twenty years as is so often true in the adult.

Almost all the diseases of childhood assume this more acute nature. On the other hand, a child responds so much more quickly to the proper variety of treatment.

Summing up the problem, therefore, we may divide the issue into two main phases: First and foremost is the prevention of tuberculosis by endowing the child with an excellent heredity. Then give him the sacred birthright that is not denied by any other animal on the globe—the right to the natural nutrition from his own mother—not from that synthetically made by man.

These, accompanied by plenty of vigorous play, proper diet in early childhood, and free exposure to sunshine, will build up a child relatively immune to this terrible scourge.

Then, secondly, once the disease has been achieved, the method of treatment should be by natural methods. If fever is present it should be combatted by means of water or by hydrotherapy treatment.

The bacterial invasion should be met with the germ-destroying rays of sunshine. If this is unavailable the ultra-violet light, as developed by the Quartz lamp, will accomplish practically the same purpose.

Then add a nutritious, wholesome, yet cleansing diet with outdoor sleeping, outdoor rest and freedom from nervous disturbances. A kind Nature will do the rest.

There is no reason why we cannot cut down the mortality of our children due to disease, at least to ten per cent of what it is at present.

Tuberculosis in children is a preventable disease, and, even where it is acquired, is curable if we but use the sane, sensible methods so self-evident in their logic and applicability.

CHAPTER XXIX

EPIDEMIC INFANTILE PARALYSIS

This disease is of such a nature that many mothers are filled with morbid dread merely at the thought of its presence.

Every newspaper is constantly coming into contact with a group which seeks to procure scare-head publicity on almost any and every pretext in order to frighten the people into a semi-hysterical state. Far too often the motive that permeates their designs is very evident. The almost unlimited appropriations that can be procured from an hysterical people and from stampeded legislatures constitute far too tempting inducements.

Under the pressure of an epidemic scare the purse strings of an otherwise "tight" legislature are thrown wide open to that school of medicine which, at present, dominates politics. Almost anything can be procured from our legislative bodies when the psychology of "Public Safety" is sufficiently played upon. I am presenting this as a background so that you may understand the motives that frequently dominate artificially created "epidemics."

In every disease where considerable publicity has been given, it is generally noteworthy that mob psychology will place any and every disease, even remotely resembling the epidemic disease, in the epidemic classification. Even doctors are very prone to be carried away by this same mass hysteria.

Where they are deliberately looking for a definite disease, every symptom which even approximately approaches the epidemic symptoms is classed as of epi-

demic type. One usually finds what one seeks and if attention is sharply focused on a certain disease that is usually what is found.

Remember that the diagnosis of true infantile paralysis is difficult and uncertain, especially in its preliminary symptoms. Hence, do not be too prone to instantaneously suspect paralysis, when your child is suffering from nothing more than a seriously disturbed digestion. This does not mean that you should not be continuously on guard for the disease.

Rumor piles on rumor, tale on tale, until in many people's minds a superstructure of epidemic terrors is created, few of which bear either the searchlight of fact or the truth of common sense.

Medical statisticians are sharply divided into two groups: Those who constantly desire to prey on the morbid fear of the great masses, and those who desire to calm and assuage any possible public hysteria.

To take the middle part when one is betwixt and between is somewhat difficult. Hysteria never resulted in constructive work of any nature. It is impossible to take adequate sane measures of control, prevention or treatment under the misguided influences of fear or hysteria.

Past statistics show that the susceptible age for this disease is usually during the period of first dentition; that is, approximately, from the age of one to nine years. The disease attacks older people in lesser ratio as the age ascends.

IMMUNITY LIES ONLY IN THE GENERAL HEALTH RESISTANCE

In the history of past epidemics the laws of immunity have been proven again and again. Those children who had the greatest amount of physical resistance, whose eliminative organs functioned best, whose diges-

tive systems were performing at par—in short, those children with the greatest degree of health and strength—were the least likely to become subject to the disease.

When all is said and done, and when every preventative and control measure is applied, the final results are evidenced only in the resistance of the individual child.

Of course, those of you who are interested in this question will ask, "How can we build this resistance to the desired state?" The answer ought to be fairly self-evident.

There is no condition in a child's care which calls for so much detailed knowledge and common sense judgment as diet. The diet of your child, to a large extent, will determine whether or not your child is constipated; whether his body is filled with noxious gases of faulty digestion; whether his blood stream is polluted with the by-products of unexpelled body wastes.

The constipated child is, by far, the most susceptible to this disease. A clean body means a healthy body. When I say "clean," I mean clean internally much more than externally.

To maintain this splendid condition of physical health, the diet for children should be tremendously rich in the unfired fruits and vegetables.

There is no finer food in all creation than the wonderful fruits of California. Do not hesitate to feed them to your children. Fruits are laxative, wholesome, nutritious, blood-building, and above all, thoroughly corrective of the characteristic disorders of digestion during childhood.

WHITE FLOUR AND SUGAR PRODUCTS WEAKEN RESISTANCE

Give him plenty of vegetables. Train him to become accustomed to many of these vegetables in an unfired state. Let his breadstuffs be of the whole-grain va-

riety. Never feed a child white flour bread, or white flour products in any other form, especially in summer time.

It is a dietetic crime to feed a child sugar or any of the multitude of products in which sugar is found. There are ample substitutes for sugar. A mother who uses sound common sense can make many delicious confections from the wholesome dried fruits, occasionally flavoring them with honey or with genuine maple syrup.

Sugar is unfit for children's consumption and does as much as any other injurious food to destroy their precious resistance and undermine their strength.

Consequently, my first plea to mothers is to pay particular attention to the general health, to the digestive ailments and to the eliminative powers of the child. This is much more important in fact than many of the control measures instituted by the public authorities.

DRUGS ARE OF NO AVAIL IN PREVENTING OR CURING INFANTILE PARALYSIS

There is no medicine, no serum, no inoculation in any form which has proved of any value whatsoever in combating this ailment.

Mothers who resort to drugs of any kind in overcoming this disease are striving along wrong lines. Unfortunately, terrible as this disease is, and fearful as its consequences frequently are, the preliminary approach is often difficult to perceive.

SYMPTOMS

In most cases the symptoms are mild, and, in some cases, there are no symptoms. When they are marked, they frequently resemble the characteristic disturbances of childhood. A slight fever, general lassitude and indifference, crossness and irritability, perhaps associated with vomiting or nausea, sometimes with some muscle

twitch, especially of the limbs; occasionally pains in the back and bones, or in some severe cases convulsions—these symptoms will differ in intensity and kind with each individual child.

Sometimes the symptoms may last for several days, or even for a week or two. In other cases, a child may go to sleep, apparently well and strong, and awaken partially paralyzed.

These are some of the unfortunate aspects of the disease rendering it relatively difficult of diagnosis in its earlier period. Once the paralysis has seized the child, it is not such a difficult task to render a correct diagnosis. Here, however, comes the crucial phase—the question of treatment.

Regular medical treatment is, of course, via the drug route. Drugs, such as hexamine and aspirin, are usually given first. The drugs to combat fever are also used. Strychnine, and, in some cases, as the result of considerable publicity, serums have been tried.

All drug medication, according to standard authorities, has for its principal objective the alleviation of symptoms. Remember, there is not a single drug, serum or inoculation known to modern medicine which can successfully overcome the paralysis or even prevent it.

Hence, the question which interests most mothers in event of their child becoming afflicted with this disease is, "What is to be done?"

HOW TO HANDLE A CASE OF EPIDEMIC INFANTILE PARALYSIS

First, this disease, according to the law, is a communicable disease. The health authorities should be notified for quarantine purposes. All children who have come in contact with the child affected should be kept away from other children, at least for a two-week

period. It is the social obligation of those affected to respect the quarantine laws.

Next, ascertain the fever—whether it is high or low. By “high” I mean more than two degrees above normal. It should then be kept rigidly under control by means of water applications—the alternate warm and cold water applications to the abdomen have been found most effective in controlling the fever symptoms. These should be continued until the waste material is completely expelled.

The skin should be kept open by frequent tepid baths. There is no necessity for giving any nutrition. It is a serious mistake to feed a child suffering with fever, and a still greater mistake to feed heavy or commonly called “nutritious” stimulating foods during the preliminary paralysis attack. The child needs every particle of his vital powers to overthrow the toxic onslaught of the disease and is in poor condition to handle the accumulation of food.

For the average child, an occasional glass of pure, fresh, sweet orange juice and an occasional small cup of vegetable broth are all that are needed during the initial stages.

Complete rest and quiet are always indicated and necessary. None but mother or nurse should be permitted to remain in the room. The child's nasal and mouth secretions should be burned, and the most rigid antiseptic conditions should prevail in the sick-room. All visitors must be kept away. The child must be allowed to convalesce in quiet and peace.

When the paralysis has set in, there is still no reason for the parents to despair. Thousands of cases have been known to make a full and complete recovery, even though the initial paralysis was very severe. Most of them recover with relatively no treatment, or as in many

cases, in spite of wrong, injudicious, and injurious treatment.

In practically every case, the paralysis which is seen at the start is usually of a very much more severe type than the child has at a later date. To a considerable extent, the disease is self-healing and self-corrective. However, that should not prevent the parents from taking constructive positive measures to assist Nature's processes.

For the first week to ten days or thereabouts, no treatment, excepting, of course, ordinary convalescent care, should be instituted. The child should be given an opportunity to recuperate and to recover from the effects of the devastating fever. After that it becomes largely a matter of routine treatment, whose success is determined largely by the persistence and common sense of the parents.

MUSCULAR RE-EDUCATION IS THE ONLY SOLUTION FOLLOWING THE ATTACK

Before outlining the customary drugless treatment for paralysis, one should understand exactly what has taken place in the acute infection of infantile paralysis.

When the child cannot use either arms or feet, it should be understood that direct impairment of the tissues of the limbs has not occurred.

Infantile paralysis is, mainly, a nervous disease. The nerve fibres of the spinal cord and sometimes the brain are the structures affected. It is only as these nerve fibres govern the various muscles that the function of these muscles is impaired in any fashion. The disease is really in the spinal cord. The effects of the disease are shown in the extremities or external muscles. Consequently, the treatment must be from a twofold aspect:

First, by building up and assisting the recovery of the nerves governing the limbs; and secondly, by the re-education of the muscles involved in the paralysis.

Nervous recuperation may best be accomplished by giving to the diseased nerves the cleanest and most wholesome blood stream that can possibly nourish them.

This does not mean that the child should be forced to eat large quantities of foods which are commonly classed as nutritious. What it really means is that, by diet, the general health of the child may be brought to maximum efficiency. This the mother can intelligently do if she is instructed in the principles of diet.

Next comes a long-drawn-out program of muscle re-education and re-training. If this training process is not followed, or if it is followed inefficiently, the tendency is for the muscles to become atrophied and wasted.

It is an established fact of physiology that an organ which is not used will always tend to atrophy and shrink. It is because of this law that five, ten or fifteen years after a paralytic attack, the muscles and structures of the limbs affected may be shrunken and of a smaller size than the unaffected muscles.

How can this muscle-retraining and re-educating program best be accomplished?

There are several methods of procedure and several devices which have been found of considerable value. The use of a rhythmic galvanic or faradic electric current in the hands of a skilled operator is often of considerable value. By means of this current, it is possible to produce artificial contraction of the muscles where there is not sufficient nerve force to produce natural contraction.

Rhythmic contraction of the muscles by electrical means permits the blood a freer circulation and pre-

vents, to a considerable extent, the atrophy of the muscles involved.

There is no reason why, after a few of these electrical treatments, the average mother cannot be trained in their use so that she may give them to her child for a long period of time.

Next is the problem of maintaining a free blood circulation and a sufficient venous drainage. Massage answers this purpose admirably. Mothers can be taught some of the simple rudiments of massage technique by a good masseur so that they may do this work for their child at home.

Experience has shown that the benefits of free circulation are very great. A few of the simple principles of both osteopathic and chiropractic spinal technique ought to be taught to the mother who is compelled to take care of a child suffering from paralysis.

Of course it is impractical for the average mother to give a complete manipulative treatment. I am stressing the value of home treatment largely because the muscular re-education and re-training is a matter of years and not of months. Splendid work in this direction has been done and the results are very optimistic.

From the previous epidemics of this disease thousands of cases have responded to drugless treatment in a splendid fashion.

CHAPTER XXX

CONSTIPATION

It seems from the number of letters received from anxious mothers that constipation is the most important health problem confronting them in rearing baby.

When we get down to the final analysis, constipation and the resultant pollution of the blood stream are unquestionably the principal causes of most of the diseases of infancy and childhood.

We know that it is an irrefutable law that bacteria, in order to develop, must have food material upon which to sustain themselves. This bacterial food is made up of the body wastes.

A CLEAN BOWEL IMPLIES CLEAN BLOOD

We also know that the source of nutrition for the blood stream comes from the intestinal system. Hence, if we keep the source clean and untainted, the innumerable blood vessels must contain relatively clean, pure blood.

Before we actually handle the question of infantile constipation let me emphatically state that the average "one a day" bowel action, which most mothers accept, and with which they are perfectly satisfied, is absolutely inadequate from a health standpoint.

Most infants receive five feedings per day. Some take six. As they grow older, of course, the feeding periods are lessened, but the quantity consumed at each meal becomes greater.

One bowel elimination per day means that a certain quantity of food must remain in the intestinal system at

least twenty-four hours, then twenty hours, sixteen hours and so on down, depending on how frequently baby is fed.

For instance, if baby has a natural passage each morning it means that the food he consumed the day before, immediately following the natural movement, remained in his digestive system for approximately twenty-four hours.

We know that it takes, at the most, six hours for the waste to pass through from one end of the digestive tube to the other. For eighteen hours, therefore, that feeding must lie undischarged. The other feedings would be proportionately less.

I am giving you this illustration to emphasize my declaration that baby's bowels must move at least two or three times per day to maintain the ideal perfect health which we desire him to have.

ONE BOWEL MOVEMENT PER DAY MEANS CONSTIPATION

Reasoning "a priori" we can say that baby is partially constipated if his bowels move but once per day. This will inevitably be evidenced by the discharge of rectal gases.

The question now arises: What is to be done? If baby be breast fed, something, you can rest assured, is wrong with mother's dietary. Remember each milk cell is the physiological reflection of mother's condition. If she be thoroughly constipated and her digestive system filled with gas, it must inevitably tell on baby.

UNCOOKED FRUITS AND VEGETABLES ARE THE BEST NATURAL LAXATIVES

Therefore, mothers should consume much greater quantities of the coarse vegetables and more fresh or

dried fruit, especially as a substitute for the regulation meat, eggs, milk, coffee, sugar and pastry diet.

If baby is not breast fed, then the incorporation of greater quantities of fruits and fruit juices, vegetable juices, and vegetable broths should go into his dietary.

From the age of eight or nine months on, there is no reason why baby's dietary may not include fresh pulped fruit.

Oranges, especially, help immensely in overcoming constipation. Black mission figs, soaked twelve hours in cool water, make a delicious drink which has a splendid effect on baby's bowels.

Prunes that have been chopped up and then soaked twelve to twenty-four hours are also effective in the combating of constipation.

Babies of this age may also be given pulped tomato, pulped peaches, grapes and loquats—virtually every California fruit in season.

From this age on baby can well stand some of the pulp—not only in his orange juice but in his other food-stuffs as well.

ROUGHAGE IS NOT DIGESTED

Please, mother, do not become alarmed if you observe undigested shreds of orange pulp in baby's stools.

Let me call your attention to the fact that the orange pulp comes through undigested in adults' stools as well as in those of the baby. Coarse, fibrous cellulose material is not intended to be absorbed by the body tissues. Its primary function is to wonderfully activate the otherwise sluggish bowel tissues toward the discharge of the fecal masses, itself constituting a considerable proportion of the necessary bulk.

It is normal for the pulped substances of fruits and vegetable stuffs to come through the bowels seemingly undigested.

You may try the experiment yourself with ear corn, which lends itself readily to observation.

You will note that the outer skin of the corn kernels is generally undigested, yet you have absorbed the principal nutriment contained in the corn kernel.

QUANTITY OF BOWEL ELIMINATION IS MORE IMPORTANT THAN QUALITY

To a considerable extent, it would be better for mothers to pay less attention to the quality of baby's bowel action and more attention to the quantity and frequency.

There seems to be a current opinion among mothers that if baby's elimination be green, something must be done.

It is true that it generally shows an abnormal condition. But, on the other hand, it is very much better that the greenish waste come out than that it remain inside.

Mothers who immediately revert to barley gruel to stop the greenish discharge are making a mistake, for this substance increases constipation.

One more point concerning fruit feedings. Many of you have noted the curdling effect of the fat in the milk when given with orange juice, prune juice or fig juice. Under normal digestion it should take less than an hour for the milk in baby's stomach to pass into his small intestines.

Therefore, a feeding rule for fruit should be that all fruits, irrespective of their kind, be given one hour away from baby's milk feeding. I make this generalization, even though there are a number of exceptions.

It would act better on baby's digestive system if his tiny stomach had but one kind of food at a time to digest.

CHAPTER XXXI

TREATMENT FOR CONSTIPATION

The problem of what to do for baby when he is constipated is much greater than merely giving the enema. It must always be distinctly remembered that when baby is constipated the cause of his constipation is primarily wrong diet.

This dietetic error may be the fault of the mother, if she be nursing, or the fault of the food given baby if he be fed.

Again, remember that it is the raw fruits and fibrous vegetables which do more toward relieving constipation than any other foods. Therefore, never attempt to solve the problem of constipation without first overcoming the dietetic errors.

But, you are faced with an immediate problem. Baby's bowels have not moved for twenty-four hours. What is to be done?

Do not resort to the enema at once. You may succeed by other methods just as well. Here are a few pointers:

EXERCISE FOR OVERCOMING BABY'S CONSTIPATION

First, give baby a chance to kick; loosen his clothes. Often merely permitting the free movement of his body will induce bowel action.

Next, give baby a few exercises intended to induce bowel activity. The best of them is to turn baby on his back; grasp the ankles firmly; slowly and rhythmically bring baby's knees to touch his chest. By this means pressure is exerted on the rectal muscles, and, oftentimes, the distressing gas will be discharged even though full bowel action may not be induced.

RECTAL DILATION

Many babies, especially those afflicted with supernervous mothers, have a condition of constipation due to tightened rectal muscles. If you will carefully feel the outside sphincter muscles (the circular muscles which govern the bowel passage of the rectum) you will find them tight and drawn.

Many infantile cases of constipation may be overcome by a gentle massage of the muscles on the "small of the back" and in the vicinity of the rectal opening.

If neither exercise nor the gentle massage succeeds, there are still other courses open.

When baby's sphincter muscle is very tight, the least little bit of rectal dilation, from 10 to 15 seconds, will often induce bowel action and avoid the use of the enema.

The best way to do this is to purchase an infant's syringe and remove the nozzle from the bulb. Carefully clean the nozzle and lubricate it with olive oil or petroleum jelly, sometimes called vaseline. Then with the fingertips lubricate the external rectal opening.

Slowly insert the nozzle with a screw-like motion. Rotate very slightly so as to create a gentle pressure on the internal portion of the rectum. Withdraw the nozzle and resume baby's knee-chest exercise for twelve or fifteen movements.

In many cases this simple procedure, in which no water or other substance is introduced into baby's rectum, will be adequate.

Wait at least half an hour after this procedure. If baby's bowels still do not move, then give the enema as outlined in the chapter on enemas.

CHAPTER XXXII

ENEMAS

The sooner we recognize that constipation is a disease in the same sense as is any other chronic disease of baby, the sooner we can start baby on a career of health and vigor.

Constipation is the bane of baby's early existence and to it may be traced many of the evils of typical children's diseases such as whooping cough, chicken pox, measles and others. In fact it is the corner-stone upon which the superstructure of most other diseases are built.

Of course constipation must be overcome by means of diet. All other measures are palliative, temporary and can do very little toward reestablishing normal function. Many of these measures, such as laxative medication, suppositories and enemas, are definitely injurious and should be used, even under the most favorable conditions, for but a short time.

However, we frequently encounter acute conditions of illness in baby—periods when instant action is necessary and when one cannot wait for the cumulative effect of corrective diet. The emergency arises when it is absolutely necessary to clean baby's digestive organs by means of the enema, the only safe and the most preferred manner of accomplishing this objective.

Most mothers reading this book are familiar with these facts. Thousands of babies receive enemas, many daily. In view of the universal usage of the enema in care of the baby, mothers ought to know some details of the technique of its administration.

In the first place the apparatus used for the other members of the family is not at all to be desired. In

every drug store one can purchase an infant's syringe in two or three sizes. For a babe under six months the smallest size is the only kind which should be used. For a child from six months to four years the second size may be used, while from four years up the adult equipment with the smallest nozzle available may be used.

ADMINISTRATION OF THE ENEMA

There are many kinds of enemas. For various purposes one uses the cold enema or the warm enema, the salt enema or the soap-suds enema, the oil enema and miscellaneous others. Each has a definite function beside that of elimination and mothers should understand their purposes. However, the technique of enema administration is fairly definite. There are several rules which mothers ought to understand.

At all times the nozzle should be lubricated with either paraffin oil, vaseline, olive oil or some similar oil. Baby should be on his back preferably, his legs held against his chest with the buttocks protruding. Unless the syringe be entirely full, a few drops ought to be expelled in order that air shall not enter baby's small bowel. Instead of thrusting straight inward and possibly injuring the delicate tissue, a turning screw-like motion is much more advisable.

The regulation nozzle, infant's size, is approximately an inch and a half in length. This may be freely inserted to its full length, unless a definite disease condition exists inside of baby's rectum. Compression of the bulb should not take place until full insertion of the nozzle has been made. As the bulb is squeezed the entire syringe should be slowly withdrawn. As a rule, two to four ounces should be ample for a child under six months of age.

Mothers often make the mistake of loading baby's rectum with an excessive quantity of water. In most

cases the minimum quantity of water will act quite as efficiently as the maximum. It is not so much the washing action of the water which does the work as the fact that peristalsis is established when the bowel seeks to discharge the accumulated intestinal waste. An excessive quantity of water in some cases might do injury because of the sagging effect upon the rectum.

Do not make the mistake of forcing the water into the rectum with too great a force or with undue speed. The water should be permitted to flow slowly, evenly and with minimum pressure.

THE COMPOSITION OF VARIOUS ENEMAS

Now as to the various types of enemas.

For an ordinary uncomplicated condition of constipation a plain water enema at a temperature of about 98 degrees is usually most satisfactory. However, if fever be present, as is usually the case in acute disease, it is advisable to have the enema considerably cooler. Where the fever is beyond two degrees above normal, a temperature of approximately 70 degrees is to be preferred.

The common practice of using foreign substances in the ordinary enema is to be decried. Many mothers seem to think that an enema is unsatisfactory unless it contains a cake of soap, or a cup of salt, or molasses and milk. Unless there be a definite diseased condition which warrants it, these foreign substances are not justified.

Under some circumstances ingredients other than water are sometimes necessary. For instance, if baby's bowels are extremely inflamed and irritated, an olive oil enema will be found extremely soothing and a good counter-irritant. Where a child is quite prostrated, with the vital powers at low ebb, the salt enema will frequently act in a stimulating fashion. A good for-

mula is a teaspoonful of salt to eight ounces of water or the same relative proportion when a smaller quantity of water is used.

When baby is afflicted with worms the salt enema is also indicated as the salt has a destructive action upon the intestinal parasites. In some extreme cases where baby has considerable difficulty in passing the waste because of its undue hardness, an enema or two containing two or three ounces of glycerine, will serve to soften the fecal masses and, at least, temporarily, relieve baby.

The enema may serve a very useful purpose when confronted with many of the acute ailments that come to baby. However, one should use it with discretion, know when and how, and avoid the injury consequent to its excessive use.

Under no conditions should the enema be classified as a remedy for constipation. It is merely the least of all laxative evils. Just as soon as baby can be placed upon a natural dietary it should be discontinued.

CHAPTER XXXII.

WORMS

Much has been written concerning the symptoms of intestinal parasites.

Such reactions as nightmares, dark circles, nervous irritation, itch, spasms, have been described again and again. But such symptoms may also occur in other diseases.

Therefore, the question whether worms are present or not devolves not so much upon whether one has the symptoms indicative of worms but rather upon their actual presence.

WORMS SHOW

There is no intestinal parasite which will not show itself in one form or another in the stools. If there is one large worm, segments will appear. If there are many small worms, either the worms themselves or their eggs will appear in the stool. Therefore, in order to be definitely certain whether worms are present or not, the stools must be watched.

Worms cannot gain a foothold in a clean intestine. They can neither grow nor develop unless the environment for their growth is present.

This environment is usually an inflamed mucous membrane, a weakened blood resistance, and a liberal supply of foodstuffs in the intestine.

KINDS OF WORMS

Mothers should know the origin of intestinal parasites.

There are many types of foods which are impregnated with either the worms themselves, their larvæ or

their eggs. Different foods have different kinds of worms.

However, numerous as these parasites may be, yet we can simmer them down to practically three or four distinct groups, the most important being tapeworm and pinworm.

Both of these come, in almost every case, from the consumption of infected meatstuffs. Both of them grow only in an environment where considerable meat and flesh protein products are consumed.

In the treatment I have outlined for tapeworm, one should be constantly on guard to observe that the head is discharged as well as the body. In fact, if the head is discharged, the body will die.

The head of a tapeworm is very much smaller than the individual segments. One cannot be sure the entire worm is discharged until the head is destroyed.

Pinworms, however, are a more uncertain task. They are usually present by the millions, every bowel action being thoroughly saturated with them.

In their treatment one must persist until they are completely discharged. The bowels of a child suffering from pinworms must be continuously watched. One cannot be certain that they are discharged until there is not only freedom from all irritational symptoms but also when the bowel substance no longer shows their presence.

When one already has worms, the question of treatment is, of course, paramount. The prevention lies almost exclusively in a clean intestine, a free elimination and in a sensible diet.

TREATMENT

Treatment must also proceed in the same direction.

If worms are present in a child, an orange juice diet

for two or three days is perhaps the most effective manner to cleanse the intestine of its waste.

The grip of the worms onto the mucous membrane is loosened because they no longer have the food on which they thrive.

This may be followed by the ingestion of substances highly antagonistic to their presence.

Take a full bulb of garlic. Macerate it. Permit it to simmer slowly in a pint of milk for about one hour. Then strain the garlic, leaving an aromatic infusion of garlic essence.

Give this to the child. Follow immediately by a cathartic, preferably castor oil. Six or eight hours later, use an enema freely.

If one wants even more effective results in driving out tiny thread-worms, prepare an infusion of quassia by pouring a pint and a half of warm water over one and one-half drams of finely rasped quassia wood. Let it stand for half an hour. Strain it. Then give an enema of this fluid. Have the child retain the enema, if possible, for five or ten minutes. Then evacuate.

Follow this by two or three plain water enemas so as to dispose of all the quassia water remaining. Then place the child on a diet of fruit for the ensuing two or three days.

Do not resume dairy products or cereal products for a period of ten days.

This whole treatment is usually very effective in the removal of pinworms. Far more important, however, is the prevention.

See that your child does not become constipated. Feed him as he should be fed and the environment for the presence of worms will not exist.

CHAPTER XXXIV

CAN DRUGS CURE COLIC?

One of the big problems of infant feeding is the government and control of colic. Colic is essentially excessive gas due to faulty diet and to inadequate elimination.

When a child's bowels move once a day and that child receives five, six or seven feedings, as the case may be, how can you reasonably expect his digestive system, thoroughly bloated and colicky as it is, to retain each successive meal?

Gas and constipation are the important contributing causes of colic.

LAXATIVES DO NOT CURE COLIC

Many mothers know this and attempt to solve the problem in a thoroughly stupid and unintelligent fashion. I have had, and every practitioner has had, cases where such nostrums as milk of magnesia, castoria, castor oil, etc., were used, sometimes with every feeding, or at least once per day.

It is true that baby's bowels will move when these drugs are given, and that colic will cease, but the physiological price is too great.

I defy anyone to prove that castor oil, milk of magnesia, or any other medicinal laxative ever *cured* a case of infant constipation.

It is not in the nature of drugs to cure. The best that they can do is to alleviate, to palliate, or to suppress the symptoms.

CHAPTER XXXV

DIARRHŒA

What is diarrhœa? What induces it? How can it be prevented? How can it be overcome? These and similar questions inevitably come to mind in discussing this problem.

Diarrhœa is the antithesis of constipation. Constipation is inadequate elimination; diarrhœa is excessive and profuse elimination.

When we study the body closely, we find it responds to laws of action and reaction. Like the swing of the pendulum we have two extremes—one constipation, the other diarrhœa. One is complementary to the other and in very many cases follows it.

What takes place during diarrhœa? Diarrhœa is to the intestinal system what the cold is to the respiratory system—Nature's great attempt, her supreme effort toward cleansing and purification.

During a cold, Nature discharges mucous and pus, together with foul gases which are frequently burned up by fever. In diarrhœa the same thing in its own fashion occurs. The intestines are discharging mucous and excreta which has lain in the digestive tube sometimes for months. Diarrhœa bowel action is watery and loaded with the shreds of catarrhal congestion.

UNCOMPLICATED DIARRHŒA SHOULD NOT BE STOPPED BY DRUGS

"Should diarrhœa be stopped?" is perhaps your next question.

Care of the Body has preached again and again that every eliminative process is a welcome one. That is,

it is the foul wastes which are retained in the digestive tube which cause ill health.

The body's efforts toward self-purification should not be retarded. Instead every encouragement should be given to get rid of the putrid fermenting materials that play havoc with normal function.

In short, the things which come out of the body keep one well. It is the putrid material remaining inside which makes one sick.

Therefore, the normal, uncomplicated condition of diarrhoea should not be stopped. It should be greeted as a welcome sign that the intestine is cleansing itself.

Most conditions of diarrhoea are unassociated with prostration or exhaustion. Unless it is complicated with some other serious manifestation, it should never be interfered with.

What should be the diet during a condition of diarrhoea?

DIET DURING DIARRHOEA

Here I take sharp issue with medical practice. Orthodox medical practice will prescribe the constipating foods during diarrhoea and the laxative foods during constipation.

When Nature seeks to discharge this putrid waste from the intestinal tract, she has a definite mission. Nature should be assisted, not retarded, in her mission. If elimination is desired, elimination should be accelerated. Diarrhoea is elimination.

Therefore, the laxative fruits are more desirable during the presence of diarrhoea than are the constipating, refined cereals, gelatine, eggs, meats, breadstuffs, etc.

A child suffering from uncomplicated diarrhoea should be fed only fruits for a day or two, and inevitably you will find the symptoms disappearing.

CHAPTER XXXVI

WHEN BABY'S SKIN ITCHES

Many types of skin diseases, especially during the eruptive period, are associated with itch.

With children the desire to scratch becomes so keen that there is danger of their breaking the scab crust of the skin sores and infecting them with their dirty hands.

Tying the hands, as I have seen parents do to children to prevent the giving of relief, is a form of sharp cruelty.

The desire to scratch is a simple natural phenomenon. The areas, where the skin eruptions desire more blood and freer circulation, itch. Scratching relieves the itch.

Therefore, what is the sensible way of furnishing the necessary relief and, at the same time, preventing injury or infection?

COLD WATER SOOTHES AND RELIEVES

If the skin eruption is on an accessible part of the body, the application of cold packs (cloths dipped in cold water and covered with a dry cloth) will give relief.

Cold water soothes and refreshes. The skin reaction from it is to create free circulation.

If, however, the cold applications fail to sufficiently alleviate, scratching is the only method of relief.

Do not use the fingernails in the ordinary fashion. Take any clean cloth. Dip it in cold water. Cover the itching surface with it. Then, with the fingertips, but not with the fingernails, create a deep rubbing mo-

tion over the itchy surface. By this means the necessary friction may be applied, the congestion decreased, and a freer circulation established.

There is also little danger of infection if the cloth be clean, or of the tearing away of the scab crust with the consequent pain and bleeding.

CHAPTER XXXVII

SKIN ERUPTIONS

Even in the very early life of baby he is frequently confronted with conditions which usually arise in later years.

The scrofulous, pimply, skin-blotched type of child is frequently encountered. Sometimes he is born this way. Oftener it is the result of poor feeding and of wrong hygiene.

As we glance over the list of characteristic infants' diseases we see that most of them are associated with a skin eruption of one kind or another.

For instance, measles, scarlet fever, typhoid, scarletina, chicken-pox, smallpox, German measles—all have their individual kinds of rash or skin eruption.

However, there are other skin eruptions which do not indicate disease of a serious nature. For example, during the warm, summer days when baby is wrapped too warmly and too snugly, he is very likely to develop a small, pimply kind of rash, generally designated as prickly heat.

A skin eruption of a relatively harmless variety, as contrasted to the eruption which indicates a more serious disease, depends, to a considerable extent, upon the associated symptoms.

When baby, to all other appearances, is in good health, active, vigorous, sleeping well, digesting well, and a slight skin eruption occurs, one may be pretty sure that it is not a serious condition.

The handling of this type of skin eruption requires merely sound, common sense and normal intelligence. You will generally find that its cause lies in the care and

attention children get. To keep baby's skin soft, velvety and smooth, some rules of care must be rigidly obeyed.

SENSIBLE CARE OF THE SKIN

For instance, allowing baby's soiled napkin to remain on him is nothing short of crass criminality. Not to wash him with tepid water is equally as injurious.

His skin should be clean at all times, but more than this, his skin should be given an opportunity to breathe.

We have all seen mothers who keep baby swathed in clothes, whether he be awake or asleep. They are not satisfied until the perspiration is present in the creases of baby's thighs or neck. There is no necessity for this excessive coddling or superheating of baby after the first few weeks of his life.

Even in homes where the mother has had several children, I have frequently been compelled to correct the method in which baby is put to sleep. He is bundled, rolled or swathed in blankets and other clothing, and then placed on his side, helpless to kick, squirm, twist or move.

Not only is his skin elimination completely suppressed, but he is rendered thoroughly uncomfortable.

Baby should be dressed for sleeping with cotton throughout; cotton flannel napkins, cotton night gown and a cotton shirt. Then he should be placed upon a comparatively hard mattress, abdomen down or on his side. He should be covered, but not wrapped. If he squirms out of his bed clothing, pin them to him.

AIR BATHS

Then, once per day, starting gradually, baby should have his clothes completely removed. Most of you have noticed the huge joy with which he kicks and squirms when his clothing and other impediments are

removed. You will, therefore, have some idea of how this agrees with him.

Starting with a three or four minute period, he should be exposed nude to the sun. Gradually increase this until he can stand an hour of it. Do not be in a hurry, however, to acclimate him, and be sure to prevent sunburn.

Prophylaxis of this kind will not only keep the skin in first-class condition, but will also prevent the development of anemia diseases, such as rickets.

SALVES SHOULD NOT BE USED

When, however, baby does get the skin eruption, please do not be in a rush to secure zinc ointment or other form of lotion, wash, or salve medication.

Try to be calm and get over the "do-something" mania.

Remember, in nine cases out of ten, it comes and goes its way without leaving sign or trace. Find out what in the dietary is causing the eruption, and what in your method of care of baby is responsible for it.

Perhaps the milk formula of his artificial feeding is wrong. In most cases you are feeding him sweets unnecessarily.

Perhaps you are swathing him too profusely.

Perhaps you do not give his skin an opportunity to breathe, as is explained to you in the skin article in this book.

Perhaps the skin is erupted because the bowel system is clogged and the toxic wastes of the tiny body are seeking to escape through the pores.

The solution is not via milk of magnesia nor by the castor oil route. Remember that constipation cannot be cured by castor oil or by milk of magnesia. If anything, they accentuate it more.

Baby's skin eruptions should be treated as a definite physiological crisis of his eliminative organs. Baby's skin should be soft, velvety and smooth. Mothers may make it so if they will but pay more attention and put more genuine study into the process of raising baby.

CHAPTER XXXVIII

ECZEMA

When a doctor does not know what the correct diagnosis of a skin lesion is, nine chances out of ten he will call it eczema.

Voluminous text-books have been written differentiating the various types of skin diseases, but so fine is this differentiation that the average practitioner cannot discern between the different types.

Since popular phraseology is familiar with the term "eczema," the doctor uses this word to cover virtually every type of skin disease. But what he calls the skin eruption is, after all, of purely secondary importance, for merely calling a disease by one name or another does not alter its form. I merely stress this to illustrate an overwhelming, preponderant ignorance of the general structure and physiology of diseases of the skin.

The thing that is of importance to the patient is treatment. In the final analysis that is the sole relationship of the patient to his doctor. "How can I get well? How can I secure relief from the symptoms which are bothering me?"—these are paramount questions.

ECZEMA MEDICINES ARE USELESS

In numerous advertisements countless messages of patented medicines are brought to public notice, most of them with sharply misleading statements.

Remedy "so and so"—guaranteed to cure eczema or other skin diseases in forty-eight hours; nostrum "so and so"—feeds and builds up the skin, supplying the proper nutrition; remedy "this or that"—furnishes the ingredients necessary to overcome the skin eruption.

Advertisements such as these, as well as other misleading statements, have educated the public to a definite psychology concerning skin diseases, with the result that many millions of dollars worth of useless nostrums are dumped upon the public.

To add to this, the public is psychologically prepared to receive the salves, ointments, washes and lotions prescribed via the doctor's prescription blank.

GERMS DO NOT CAUSE SKIN ERUPTIONS

In this chapter we shall analyze the action of this type of nostrum. Most of them, especially the salves and ointments, have strong antiseptic properties. These properties are based upon the belief that the skin eruption is caused by definite germs which are called in medical language, "staphylococci" and "streptococci." Medical reasoning believes that if we kill the germs we destroy the skin eruption.

The fallacy of this belief may be evidenced at once. Germs are like every other type of insect so far as their reactions to biological laws are concerned. Germs cannot grow except where there is an accumulation of debris and morbid waste material.

Germs are omnipresent, universal, everywhere, at all times, and under all conditions. To attempt to produce a sterile environment is utterly idiotic.

The only way a human being can secure a perfectly sterile skin which will remain sterile would be to immerse himself in a ten-foot tank of carbolic acid.

Germs are not the cause of skin eruptions. The morbid wastes accumulating in the blood stream are the first cause—then come the germs.

Remove the waste by sensible diet, intelligent application of water treatments, and other measures—then at once the cause for skin eruption disappears.

Reliance on antiseptics, whether prescribed by physician or drug store clerk, is futile and unavailing, either as a preventative or as a cure for the commonly known disease—eczema.

CHAPTER XXXIX

TALCUM POWDER AND CHAFING

It is not very long in baby's career before mother finds it necessary to sprinkle and powder him with various kinds of dusting powders.

Baby becomes chafed and his skin irritated, especially in the chubby little areas that are creased with fat.

Almost without thinking mother resorts to the only remedy known to her—the various dusting powders. No baby kit is complete without at least one or two cans of these products.

Unhesitatingly mothers sprinkle the contents on baby's skin even when he is not chafed. They seem to believe it acts as a preventive against skin irritation. After his bath it is nothing unusual to see a mother cover her babe from "stem to stern" with these compounds.

It is true that often remedial measures must be taken to offset an irritation that baby has acquired. But the paramount question is, "Why should he acquire it?"

SKIN CHAFING IS PREVENTABLE

In nine cases out of ten the irritation to baby's skin is a sign of carelessness, indolence, indifference or ignorance on the part of baby's mother or nurse. There is no necessity for baby's skin to become erupted or infected at any time if we but used some of the elements of common sense with which most animals are endowed.

In this problem, as in most other health problems, prevention is vastly superior to remedies. What are the causes of irritation? With this knowledge we may secure an understanding of prevention.

THE SOILED NAPKIN

First and foremost comes the retention of baby's wet napkin against his skin. A wet pack such as is made by a soft napkin is enough to irritate and inflame the skin of a tough, weather-beaten adult, let alone the delicate, sensitive, velvet-like skin of a young baby.

Baby's napkin should be changed immediately after he awakens. Mothers who neglect this are guilty of gross negligence. Immediately after a change of napkin all that is necessary is to bathe baby's skin with tepid water, using a clean cloth or sterile gauze. Never use the same cloth twice unless it has been thoroughly boiled and cleansed with a non-alkaline soap.

This, however, does not constitute the principal cause for baby's chafed skin. Most mothers are not guilty of this kind of negligence. The great majority know enough to change baby's napkin immediately after it is soiled.

THE SKIN MUST BE EXPOSED TO THE AIR

Here, however, lies the rub. It is in the continuous change from one napkin to another—never letting baby's skin air—that the damage is done. Even your adult skin would suffer if you put on one tight-fitting garment after another.

There should be periodic intervals in which baby should be unnapkined. There is no reason why baby cannot be left on his bed for several hours at a time during his waking periods, with his napkin underneath, rather than have it bound snugly around him, shutting out the air and bringing the irritating discharges close to his little body.

Even when he is napkined many mothers make the mistake of pinning the garment too snugly. A loose-fitting napkin permits a free circulation of air. A tight fitting one chafes and produces inflammation.

AIRTIGHT GARMENTS

Aside from these causes, there is the injury done to baby when mother takes him "visiting." Of course she does not want to damage her clothes. Consequently, modern ingenuity has devised a garment to prevent this in the form of rubber pantalettes.

These fit tightly around baby's abdomen and thighs, by means of elastic bands, completely preventing free circulation and entirely retaining baby's excreta.

It not only stops air circulation and keeps in retained wastes, but it also increases the local temperature and induces every condition essential toward irritation.

These garments are a crime against baby's tender skin. Put on a double or triple napkin if necessary when you take baby out visiting, but, in decency to him, abstain from these unnecessary cruelties.

ACID URINE

Next, of course, comes the condition which is not so much due to the external care given baby as it is to his method of feeding and to his resultant health.

Far too many babies discharge a urine secretion that is exceedingly odorous, highly acid, and strongly irritating. A secretion such as this will irritate any skin with which it comes in contact.

Of course, here the solution is to change baby's diet and thus to prevent irritation to the skin. Usually hyper-acid urine is due to constipation and to the excessive consumption of sugars and of refined cereals.

Fruits are the logical antidote for this condition. In the case of the small baby, natural uncooked fruit juices will serve the same purpose.

DUSTING POWDERS ARE INJURIOUS

However, when chafing has already occurred, the question which arises in mother's mind is, "What's to be done?"

Most dusting powders are made of compounds of zinc, usually zinc stearate or zinc oxide, generally mixed with boric acid and talcum. All of these substances are injurious, for they coagulate the external surface of baby's skin and thereby do it considerable injury.

When baby's skin becomes chafed, a lubricant of olive oil, plus nakedness, plus sun-baths, plus change in diet, plus adequate care in frequent changing of napkins, minus dusting powders and minus doctor's prescriptions—this is about the most practical drugless formula which works satisfactorily.

Baby's skin requires intelligent care—not drugs!

CHAPTER XL

THE SUN AS A HEALING AGENT

Modern scientific research is today making discoveries of truths which have been known many thousands of years.

The trend of public opinion, as well as of professional opinion, is continuously toward a greater simplification in healing methods. The day in which chemicals with long mysterious names and mystifying chemical concoctions are used for the cure of disease is fast giving way to the use of rational, natural methods.

Of all the agents devised for the treatment of disease one of the most rational and simple is the proper use of sunlight.

LACK OF SUNSHINE IS RESPONSIBLE FOR MANY WASTING DISEASES

It has been proved conclusively, beyond the faintest doubt, that the lack of sufficient sunshine is responsible for many diseases and ailments.

Throughout living Nature sunshine is the great life force. It gives life to both plant and animal. It furnishes the necessary stimulus, the vibrant energy so essential toward the maintenance of health and vitality.

The green plant, flower or tree could not survive the absence of sunlight.

The animal responds in a similar fashion.

Our failure to utilize the precious health given forth by the sun's rays is evidenced by a series of unnecessary diseases that afflict mankind.

In a vague way the sages of old knew the value of sunlight, but it has taken modern scientific research to place these values in definite, specific and concrete

terms. Experimentation shows that the sun not only cures, but prevents many diseases. It is my purpose to show the relationship between the healing values of the sun's rays and certain types of diseases.

Physicians of various schools have estimated that from 10 to 90 per cent of America's childhood is rickety to a greater or lesser extent. Of course, this variation is due mainly to our inability to accurately define rickets. In a general way, however, the clinical picture of rickets is fairly clear.

Children whose bones fail to develop the necessary strength and vitality, who are retarded in growth, often having large protruding abdomens with pale skin, expressionless countenance, and who are listless, tired, showing none of the characteristic exuberance of an ordinary child, are generally considered rickety.

It is true that the background for rickets is largely a question of faulty diet. It has been shown, beyond a doubt, that when the diet incorporates the all-important vitamins and mineral salts found in fruit juices, in the whole fruits and in many vegetables, remarkable progress in overcoming rickets has been made.

COD LIVER OIL IS NO SUBSTITUTE FOR SUNSHINE

The medical profession seeks to alleviate this disease by means of cod liver oil, because this oil is supposed to contain the vital mineral salts and precious vitamins in a concentrated form.

But if we temporarily disregard the important question of diet, we still have a certain element lacking in the body welfare and upbringing of the child—namely, the life-giving properties of sunshine.

What is there in sunlight that makes it so indispensable? What property does it impart that changes the physical condition of an anæmic, rickety child to that of health, exuberance and energy?

What is the action of sunlight by means of which it accomplishes this almost miraculous reconstruction of the ailing child?

Without necessarily going into technical details, we know that certain rays are given forth in the spectral emanations of sunlight.

Most of you know that ordinary white light consists of seven primary colors, the seven colors of the spectrum. Besides these we have invisible rays of light, those which go before and after the visible spectral rays.

THE ULTRA-VIOLET ARE THE LIFE RAYS

Experiment and investigation have shown that the various rays, visible and invisible, have certain powers of healing or destruction. The rays that concern us most in the process of healing are the ones known as ultra-violet.

These are invisible rays and may be used either to the detriment or to the blessing of man. It is these rays which create sunburn. It is these rays which give the life properties to living cells. They activate, stimulate and energize the living tissue and furnish it a vital something without which life could not be maintained.

Their action on the skin is to produce a temporary congestion characterized by redness due to the overabundant accumulation of blood in the exposed area. These rays also have a penetrating power. It is assumed that they reach the blood stream directly through the layers of the skin.

It is then that their most important action takes place. The blood literally takes on a new baptism of life and passes through the vessels with fresh vigor and vim.

Doctors all over the country are awakening to the

vital necessity of providing some sun exposure for rickety and anæmic children.

Thoroughly modern hospitals are building solariums and sun parlors on their roofs. They have found that their child patients, especially, respond to treatment a great deal more readily when the sun is used as a healing agent.

THE TECHNIQUE OF THE SUN BATH

To give a child a sun bath for more than an hour or thereabouts who has never before been under the glowing sun is nothing short of gross criminality.

Sun baths, like other strong therapeutic measures, should commence very gradually.

For a child who has never before been exposed to the sun's rays, a minute to a minute and a half is ample exposure for the first day. A conservative program would be approximately one minute increase each day until baby is exposed twenty minutes.

Many children will stand much more. Practically none will be harmed by this conservative dosage.

A few rules concerning the taking of sun baths by infants and children will not be amiss:

(1) Protect the eyes from the direct glare of the sun.

(2) Never permit the body to become overheated. A cold hand-rub will prevent this.

(3) All sun baths should be by direct ray—not through glass or through screen. Glass filters out the actinic rays and weakens the value of the sun bath. Screens throw tiny shadows which retard the rays' beneficial activity.

(4) During the winter in Southern California, the best time is between 11 a.m. and 2 p.m. In summer from 9 a.m. to 11 a.m. and from 3 to 6 p.m.

(5) Infants who have never had nude sun baths should be protected against wind draughts. Therefore give the sun bath in a wind-sheltered place.

(6) Children unaccustomed to sun baths should not be given them during cold weather—at least, not until they are thoroughly adapted.

These practical suggestions should help mothers in carrying out natural methods for overcoming rickets and poor physical development in their infants and children.

SUN BATHS IN SKIN DISEASES

Next, dealing with other ailments of childhood:

The child whose skin is mottled or erupted is a very common sight. We love to think of children as having smooth, velvety complexions, but alas, too often they are splotted and blemished. For this type of ailment sun baths have been shown to be of inestimable value.

Sunlight has the ability to destroy sick, diseased skin tissue. In skin eruptions of all types the erupted area is diseased tissue.

When exposed gradually, yet freely to the direct action of the sun, the healthy tissue that lies underneath is invigorated toward renewed activity and growth, while the diseased tissue that lies on the surface is rapidly cast off.

There is no finer external healing agent than the sun. It is infinitely superior to medicines, ointments and lotions.

Next comes that dread disease of both childhood and adult, tuberculosis.

More and more the healing power of the sun is being impressed upon those who are specializing in its treatment.

The most potent antiseptic, capable of destroying even the vigorous germ of tuberculosis, is sunlight.

It not only helps to arrest this disease, but also does more than the reputed claims of any medicine in destroying the germs of tuberculosis. Everywhere up-to-date sanatoriums and hospitals are exposing tubercular patients to sunlight. The results have been pleasing to a very marked degree.

Basking in the sunshine, even for persons in fairly normal health, helps to maintain health. Do not be afraid of sunlight. It is a mistake to keep it out of the house. It is a greater mistake to remain outside of its life-giving forces. Used in moderation, under sensible conditions, sunlight acts as one of Nature's greatest healing forces.

CHAPTER XLI

THE FRAUD OF INOCULATION

The following excellent article by Dr. Hadwen is reprinted from the magazine Truth:

"Inoculation is the latest medical craze. It is the panacea for every ill. It will prevent disease in the case of typhoid and tetanus, but it will not cure. It will cure in the case of tuberculosis and boils, but it will not prevent. And it will prevent as well as cure in the case of diphtheria, cholera, plague, and a few other diseases. That is the claim.

"When a patient is inoculated against a certain ailment and does not subsequently contract it, the inoculation gets the credit. If, after inoculation, a mild attack supervenes, it is the inoculation which saved the patient from a severe one; but should a severe attack assert itself and the patient just escape with his life, it is the inoculation which preserved him from death.

"When, however, death itself claims the subject of inoculation, we are informed that there must have been something wrong with the prophylactic, or that the patient was inoculated too soon or too late, or in an unskilled manner.

"The operator is often thus given away to save the credit of the nostrum. Nothing must be said against inoculation. It is the fashion of the hour, and resembles the image which Nebuchadnezzar set up; for everyone must bow down to it and worship, or the fiery furnace awaits him.

"The history of medicine is largely the history of changing medical fashions. We have universal bleeding at one time; mercurialisation at another; huge doses of alcohol for fevers at another."

HYPODERMIC INJECTIONS DESTROY THE BODY'S PROTECTIVE DEFENSES

When a drug is taken into our digestive tube it is nowhere near as deadly as when directly injected into our blood stream. The most dangerous of every possible kind of medical application is via the hypodermic needle.

In this respect the human body could be crudely compared to a cake pan with a hole in the center. When a substance is put into the hole, it is not in reality in the pan, even though the hole be a part of the pan. When a drug is put into the digestive system, it is in the anatomical body but not in the physiological body.

It is not until this drug has become absorbed by the blood and then acts upon the tissue that great damage is done. It is for this reason that poisons taken for surgical purposes often fail because it takes some time for the drug to filter into the circulation.

When, however, all the defenses of the body against drug poisoning and infection are shattered by the penetrating power of the hypodermic needle or syringe, these defenses are of no avail.

Foolish as were some of the past practices of orthodox medicine, at least they were nowhere near as dangerous and as vicious as our present day injectional type of treatment.

Think and think again and again before you permit the hypodermic needle or the syringe for any purpose.

CHAPTER XLII

MASTURBATION IN CHILDREN

Though many parents will be shocked at the knowledge, it nevertheless remains a fact, well known to every physician, that children do masturbate. Not only that, but the age at which this habit commences is often very early. Medical records show cases as early as one and one-half or two years of age.

Even though, at this early period of development, a full seminal discharge is not possible, yet the nervous orgasm may be procured.

Mothers of boy-children, especially, have invariably noted that upon arising from sleep, erection of the sex organ has occurred. The heat of too much bedclothes is often sufficient to induce this pleasurable state of sexual excitement.

Accidentally he stumbles upon the fact that friction is also pleasurable and lo, the habit is easily formed.

Far too many cases of epilepsy in children have their origin in habits of masturbation. Children of pronounced neurotic and maniacal tendencies have, in many cases, been known to masturbate chronically.

Oftentimes the mother is unaware of this practice. If she closely observes her child, however, she will readily perceive it. In very small children, self-induced masturbation is usually a reflection of a child's internal and external cleanliness.

It is indeed unfortunate that nurses and doctors do not teach mothers how to retract the foreskins of their babies, and how to clean the delicate, sensitive glans underneath.

THE RETRACTION OF THE FORESKIN SHOULD BE DONE FROM BIRTH

I have seen children from two years to fifteen in whom the foreskin has never once been retracted, with the result that the sub-surface is laden with a cheese-like, sticky substance technically known as smegma. In an effort to push back such a foreskin, bleeding and extreme pain would be induced.

Of course, there is no alternative, under such circumstances, but to insist on circumcision.

Again, internal uncleanness, especially the pressure of a bowel loaded with wastes, and of a rectum filled with undischarged fecal substance, will induce masturbative habits.

Mothers should understand a trifle more about anatomy.

INTERNAL UNCLEANLINESS ALSO RESPONSIBLE

The rectum in the boy lies immediately adjacent to the seminal vesicles, two small sacs which contain the seminal fluid.

The mechanical principles of pressure are very simple. We know, for instance, that when the belt is tightened around the urinary bladder, the desire for urinary discharge is increased. Thus it is with the two small bladders containing the seminal fluid. When the rectum presses against these two tiny sacs continuously, there is a desire to discharge the contents. Consequently, erection, sex desire, and very shortly, masturbation occur.

Of course, here the solution is to "clean house." Remove the debris from the rectum and the pressure which, in turn, induces masturbation, will be relieved. Constipation must be overcome by natural methods only.

While on this subject, mothers should understand that girl children as well as boys have a tendency to masturbate.

The female anatomy, from the skin inward, is somewhat similar to that of the male. The girl has a muscle of erection. We call it the clitoris muscle. It, also, is covered by a foreskin. When the foreskin becomes tight and secretes the same cheese-like substance known as smegma, irritation of the clitoris is also induced. Irritation induces erection. The step between erection and masturbation is but a short one.

Even though it may be astonishing to many mothers, circumcision is often recommendable for girls as well as for boys, especially where they have what is known in medical parlance as "hooded clitoris."

As in the boy, chronic constipation will also induce masturbation in the girl. This, primarily, because of a blood stream that is filled with food products which heat and stimulate the blood unnaturally, and which consequently arouse the sex passions.

Even circumcision and the overcoming of constipation will not suffice to eradicate masturbation. Children past the age of twelve or thirteen must be in a position to convert sex energy into creative force. For this purpose every mother should enthusiastically endorse and promote strenuous athletics for both boys and girls. Vigorous athletics will use up this sex energy better than any other measure.

FAVORABLE ENVIRONMENT MUST BE REMOVED

The environment favoring masturbation practices should also be considered. For instance, the hot bath will usually favor sexual stimulation while the cold bath will act reversely. Therefore, cold baths should be favored for children during puberty as well as after.

Next come the sleeping habits. Children should always sleep in bedrooms or on sleeping porches supplied with ample quantities of fresh air.

The bedclothes should be light, and just sufficient to maintain warmth. It is false economy to buy five cheap blankets with their great weight rather than one good blanket made of better material with its light weight. To prevent masturbation, the bedclothes should be as light as possible.

The habit of remaining in bed after awakening should be prevented. With the pressure of a filled rectum, a filled bladder and the animal heat of a night's rest in bed, invariably the normal, healthy youngster will arise with his sex organs turgid and erect. Inducement to masturbation is indeed great. He should be compelled to get out of bed the moment he awakens. Do not let him linger in its cozy warmth.

Finally, the entire problem of masturbation is largely an individual one of training, discipline, and home morale. Fast company, loose literature, salacious moving pictures, and suggestive magazines—these form an almost irresistible combination.

The intelligent mother will know how to guide such an environment so as to obliterate these elements.

Masturbation in children is a problem every mother must face sooner or later. Some do it intelligently. Some do it by the only means they know—the everlasting proverbial inhibition and restriction characterized by the eternal "don'ts."

Education, enlightenment and the sympathetic relationship between mother and child are infinitely more effective than all the "don'ts" in Christendom.

CHAPTER XLIII

BABY'S NAP

A sleepless baby, far too often, constitutes the bane of mother's life. Try as she will, she cannot induce him to take his nap. Every wile and every method known to her is used, but to no avail. Therefore, this chapter is intended to give a few pointers concerning baby's nap.

Were we to chart a table showing the time a child should sleep, we would have to show a continuously decreasing schedule as the child becomes older. That is, a new-born babe will sleep about twenty-one to twenty-two hours of the day, remaining awake just sufficiently long to nurse and then off to sleep again.

On the other hand, one will encounter, in the majority of five or six-year-old children, extreme difficulty in inducing them to take their nap. It is this child, more than the others, that so troubles the mother.

WHY BABY FIGHTS SLEEP

There are a number of things which ought to be understood in relation to baby's nap.

Babies fight sleep largely because their interest is centered in other things and sleep has a tendency to destroy that interest. From this you may deduce that avoidance of stimulation or excitement is the first requisite towards inducing sleep to baby.

The surest way to prevent his nap is to play with him for ten or fifteen minutes before time for him to retire. I know there is always the temptation for the grown-ups to toss his royal highness about, to hear him

chuckle, and watch him otherwise amuse himself, but they do not realize that his child's mind retains the stimulation, often for hours at a time.

Therefore, Rule Number One: For favoring sleep in children, avoid preliminary excitement of all kinds.

WHEN SHOULD HE SLEEP?

Next we deal with the time of sleep.

A hungry child will find it difficult to take his nap. This means that the favorable time for sleep with the average small child is immediately after a meal. If it is a one or two-year-old in question, a nap immediately following a mid-morning recess feeding, say about 10 o'clock, then another at about 2 or 3 o'clock, is advisable.

For an older child, however, of three and a half, four, or five, the most favorable time, in the majority of instances, is just after the noon lunch. He should then be thoroughly tired after his strenuous morning's play.

This is plus the fact that a considerable quantity of blood is taken from the brain in order to facilitate digestion and therefore the tendency will be for him to be sleepest immediately after his meal.

Mothers should train children to have a natural bowel action after each meal. Therefore baby should be permitted to discharge his waste and then he should be put to bed.

THE BEDROOM

Next, as concerns the sleeping room.

Ventilation and fresh air are prime requisites. Every window should be wide open winter and summer, night and day. Baby's bed should be adjacent to a window. If the weather is cool, give him more blankets, but do not close the windows.

"ROCK-A-BY-BABY"

Now here comes a mistake made by far too many mothers. They think that it is necessary for them to remain in baby's bedroom in order to induce him to take his nap. This is the direct means of developing a spoiled child. In a very short time he refuses to go to sleep unless mother is present. Mother then becomes thoroughly enslaved to his majesty and no one else can ever put him to bed.

When baby has finished his meal and has discharged the necessary bowel waste, fix his bed comfortably, put him in, and go out of the room.

Another mistake made is to give him toys to play with in bed under the theory that he will amuse himself until tired and then drop off to sleep. In this, also, mothers are mistaken. He will drop off to sleep very much sooner if he has nothing to play with. The time to give him toys to play with in bed is in the morning if mother doesn't want to be disturbed for a half hour or an hour after he awakens, certainly not before retiring for his nap.

"HUSH, BABY IS ASLEEP"

Many mothers seem to think that because baby is sleeping, the household routine must be markedly changed. "Baby is asleep. Don't make any noise." This is a common admonition.

A properly trained baby should be thoroughly accustomed to the usual household noises. Undue artificial quiet ought not to be necessary. There is no reason whatsoever why mother cannot carry on a conversation in an ordinary tone in the adjacent room.

Children easily become accustomed to the natural conditions of the household.

THE STUBBORN CHILD

Now we come to the problem of the obstreperous child who "just won't go to sleep."

In nine cases out of ten it becomes a battle of wills—mother against child. "You will!" "I won't!" are the battle slogans. Back and forth the lines sway and, in most cases, baby usually emerges the winner.

In a tone of hopeless resignation mother then resigns herself to the fact that "baby just won't sleep."

The surest way to develop the antagonistic will forces of a child is to oppose him. Few mothers, indeed, realize that passive resistance is by far the strongest resistance. Far fewer mothers have the faculty of seeming to ignore baby. Instead, they believe they can subdue him by their seemingly stronger will. Inevitably they fail.

When baby just simply refuses to sleep, instead of violently opposing him and saying, "You must," or "You will," it would be much wiser for mother to appear seemingly indifferent.

"Very well, mother does not care at all," and proceed to go about her business.

Left alone, apparently totally ignored and no longer stimulated by mother's opposition, baby, as a rule, will quietly go to sleep.

There is no longer the incentive for a battle royal. His interest in trying to remain awake ceases and, within a very short time he capitulates. Mother has won. Passive resistance has been stronger than the "do-or-die" spirit against baby's will.

SLEEP IS IMPORTANT

These are some influences dealing with baby's sleep.

Baby's sleep is just as important as his food. Study your own child thoroughly. Learn his peculiarities and

his idiosyncrasies. Inevitably you will find an "Achilles Heel" through which you may penetrate into his psychology. But get him to sleep. He needs it more than he does anything else.

CHAPTER XLIV

DISORDERS OF SLEEP

Mothers, more than others, can fully understand the significance of sleeplessness in babies when, night after night, they are compelled to remain awake because of a cross or a restless baby.

Baby is not a nocturnal creature. The natural thing for him to do is to sleep throughout the night. When baby awakens it is not a true insomnia in the same sense as we consider insomnia in the adult. Rather is it due to other factors in the care and maintenance of baby which prevent his procuring that necessary ease and comfort which permits of adequate sleep.

CAUSES FOR SLEEPLESSNESS

In almost every case the causes of night restlessness and night crying are due to improper feeding or over-feeding. In some cases it is due to mother's over-indulgence and the consequent formation of bad habits in baby. When baby becomes accustomed to midnight feeding he awakens for it largely through force of habit.

In some other cases baby's sleeplessness may be due to the excessive handling or rocking in which parents so love to indulge, in the belief that baby enjoys being swayed to and fro.

Oftentimes baby retires for the night in an excited and stimulated condition, due of course to the stimulation he receives from his loving parents. By the time dad has finished tossing baby to and fro and mother has shown him off to fond aunties and uncles, with various family antics performed for the benefit of his royal

highness Prince Baby, he is much too excited to induce that quiet repose and calm so necessary to sleep.

These are by far the commoner causes for baby's sleeplessness, although here and there we may find cases where there is a definite abnormal physical condition which, by reason of its development, prevents baby's sleep.

Some of these will come under respiratory ailments such as asthma conditions. Others will be caused by interference with normal respiration due to the formation of adenoids or enlarged tonsils. When baby is subjected to violent spasms of coughing, such as is present in whooping cough or bronchitis, of course, sleep is also prevented.

Most cases, however, are directly or indirectly associated with factors of nutrition. When the digestive system is laden with gas, the resultant cramps or infant's colic is sufficient to prevent normal sleep.

Sometimes sleeplessness gets to such a point that baby is faced with exhaustion. Here, again, a vicious cycle is produced. Nervous exhaustion will sometimes prevent sleep, while again it prevents the digestive system from functioning normally.

Colic perhaps takes a leading place in the causes for baby's sleeplessness, and, as you perhaps know, colic is definitely related to baby's digestion. In almost every case of infant's colic the eliminative organs are functioning much below par. Most babies suffering from colic are chronically constipated. The retention of the intestinal wastes is sufficient to induce the state of sleeplessness.

Every mother should study the cause of baby's sleeplessness. Remember it is unnatural and is bound to work harm for baby. If it is due to the formation of bad habits it merely requires perseverance to break them.

If baby has been accustomed to night feeding, substitute water for the customary feeding, and then, after a few days, stop that. Four or five nights of crying will convince him that it is futile to persist, and the habit will be broken.

IF DISEASE IS THE CAUSE, REMOVE THE CAUSE BUT DON'T SUPPRESS IT

Where baby's sleeplessness is induced by a distinct diseased condition, of course, efforts should be directed toward removing the cause. While baby is ill it is more or less likely that he will be sleepless. Under these conditions it is folly to give baby drugs or sleeping potions.

Soothing syrups and all other nostrums should be rigidly forbidden as having an intensely injurious effect upon baby's nervous system, oftentimes so weakening his vitality that he becomes liable to every kind of infectious disease.

When baby's digestion is destroyed, one of the best rules to follow is to simplify his diet as much as possible. There is no necessity for furnishing baby such a variety of food as characterizes an adult diet. When the food is good and of the proper quality, a simple dietetic menu, frugally applied, is about the best rule.

When baby cannot sleep because of a highly nervous, neurotic condition, mothers who persist in the use of pacifiers in order to secure some sleep for themselves, will inevitably reap the harvest as the condition becomes more and more accentuated.

To allay this irritability children resort to habits such as thumb-sucking. Mothers will sometimes favor this development by forcing a nipple pacifier into baby's mouth when he commences to cry.

It is difficult for mothers to really comprehend the ultimate injury that is done when these habits are permitted to develop unchecked. In every case baby

proves stronger-willed than mother. The mother who permits these habits to continue is favoring their development and is increasing the hold that they have upon him. His nervous reaction is bound to become more and more pronounced unless immediate action is taken by his parents.

THUMB-SUCKING HABITS SHOULD BE INSTANTLY BROKEN

If baby is addicted to thumb-sucking, various means of breaking this habit should be tried. His sleeves should be sewn up so that his fingers are not exposed. Sometimes a thorough taping of the thumb, in such fashion that the rough surfaces are unpleasant to the mouth, may suffice. Any of these measures require persistence and will power on the part of the mother.

If these nervous habits are permitted to continue, oftentimes the teeth come in irregularly and crooked because of malformations of the jaw. The continued fist-sucking habit forces the jaws into abnormal positions and accentuates baby's nervous disposition.

In order to sleep, baby's digestion must be normal, his elimination adequate, his nervous system calm, and his body tired.

During the day he should be given every opportunity for physical expression. All facilities of play of the most vigorous type should be procured. He should play with other children instead of with his parents. It is difficult for a parent to be a child, to understand his psychology and to conform to his childish instincts. During play, amusement should be sought, but not excitement.

SEE THAT HE IS COMFORTABLE

There are some physical factors which will be directly pertinent to baby's ability to sleep. Too many mothers make the mistake of covering baby more warmly

than is necessary for his comfort. Be careful in judging the type of bedclothes and see that he has just enough to keep him warm. The use of heavy bed-clothing should be discarded. The bundling of baby in a profuse swath of blankets makes him decidedly uncomfortable. Baby should be covered, not wrapped.

Sometimes mothers do not understand that fresh air is vital for baby. Provided he is warmly covered there need be no fear of fresh air during any period of the year. Fresh air is essential to healthful sleep.

To some extent, lack of sufficient air is responsible for the enlargement of the tonsils and for the formation of adenoid growths. Babies suffering from respiratory diseases, such as bronchitis or whooping cough, should be especially indulged in fresh air.

Sometimes the difficulty will be in the fact that baby exposes himself and consequently becomes chilled. Most mothers can easily remedy this by tucking the blankets in or even fastening them to the other bedclothes.

Continued sleeplessness is pathological, abnormal, and the cause should be ascertained. If baby shows signs of undernutrition, one should be carefully on the watch for worms. Daily inspection will usually reveal their presence. If baby has a parasite infecting the intestinal system, the irritation is sufficient to produce an extreme state of nervousness, which in turn, will be responsible for sleeplessness.

NIGHTMARES AND BAD DREAMS

In some cases baby's sleeplessness is due to bad dreams or nightmares, when he will suddenly awaken crying and screaming. Mothers ascribe this condition to every possible cause, whereas, in reality, it is largely due to disturbed digestion, over-feeding, enlarged tonsils, or some other such simple cause.

The remedy, of course, is apparent. Baby's last feeding should be the smallest of any during the day. The eliminative organs should be emptied before he retires and stimulation or excitement should be studiously avoided.

Baby's sleeplessness is a matter of habit as much as a question of disturbed physical or mental function. Inquire carefully into the routine of his habits, into the items of his diet, into the antecedent background of baby's entire life.

Sleeplessness is a problem that should be readily overcome when once the cause has been ascertained. Remember that sleeplessness is just as abnormal as any other type of disease, and that it must be treated, not merely as an incident in baby's life, but as a distinct problem of his health and welfare that must be solved.

CHAPTER XLV

SLEEPLESS SNOOKUMS

A paramount question in a great many homes where little Snookums has arrived is, "Who walks the floor?"

Promptly at 1 or 2 o'clock in the morning His Royal Highness commences his serenade.

What is to be done? This is a genuinely serious question with most mothers, and it is to be regretted that the great majority solve it unwisely.

The household unanimously agrees that anything to keep baby quiet must be done, and of course mother knows that the only thing which will keep this gluttonous mite quiet is to feed him.

Like a man, the nearest way to baby's heart is via his stomach, and to appease him, his stomach must be filled. The result is that, in a very short time, we have a marvelously spoiled baby and a thoroughly disorganized household.

NIGHT FEEDING IS A PRACTICE THAT SHOULD QUICKLY BE DISCONTINUED

Night feeding is unnecessary and avoidable. I do not know of a single condition of pathology, even of the extremely underfed child, that calls for feeding after 10 p.m.

Man is not a nocturnal animal. Baby would not be were it not that his temperament was ruined because of a thoughtless mother and of a scolding father.

In my own work, I am constantly facing the difficulty of breaking baby's bad habits.

"What shall we do if he cries?" is the invariable question.

Walk the floor, pet him, soothe him, make him comfortable, but don't feed him!

Right here let me interpose my candid opinion.

DAD SHOULD DO THE FLOOR-WALKING

Who should walk the floor? Decidedly, not mother! Of course the only one left is—dad!

As I write this, I see innumerable husbands gnashing their teeth in rage at the domestic treason I am preaching.

"Father is too tired after his day's work." Father is too sleepy, too lazy, too indifferent, too callous—these, perhaps, may be closer to the truth in many cases.

We all know that getting up at night is an uncomfortable and a disagreeable proceeding to say the least, especially in the winter, when the air is chilly and the floor cold.

Important as daddy's state of health may be, yet far more important is mother's. The nervous strain of rising at night and attempting to train baby sometimes works considerable harm. Her loss of sleep, her disturbed nervous equilibrium, her lack of rest may do considerable damage to the quality and to the quantity of her milk.

WEANING BABY FROM NIGHT FEEDINGS

The next question that arises is, "How shall baby be weaned from his nocturnal misbehavior?"

The only answer I can give to that is for mothers and fathers to grin and bear it for five days or for a week until baby knows that feedings will not be forthcoming at night.

When he cries, and he usually cries lustily, change his napkin, pick him up, soothe him and permit the belching of gas, if necessary. Then put him back, cover him warmly, and let him cry some more.

Daddy should repeat this dosage until baby is cured. Most babies will overcome this habit in a very short time.

Of course it is sometimes disagreeable to the neighbors. We do not want to disturb the neighborhood, but my sympathy is rather with the mother than with the neighbors. Until baby is trained, neighbors also will just have to grin and bear it.

In training baby to sleep nights, of course, the usual precaution against excessive crying should be followed. A generalization frequently made is that most babies ought not to be permitted to cry for more than twenty minutes, provided the crying is lusty and strenuous.

If you feel baby's abdomen during strenuous crying, you will note that the muscles are taut and stiffened. At the middle of the abdomen there is still considerable muscular weakness. Very often excessive crying, due to many factors, may induce hernia or rupture.

WHIMPERING IS NOT CRYING

However, most mothers can tell the difference between baby's spoiled whimper and his genuinely lusty, strenuous cry.

There is no harm in permitting him to whimper, even for hours, but he should not be permitted strenuous crying for more than twenty minutes. In fact it is exceedingly abnormal for a baby to cry lustily for even ten minutes. If he does, something is wrong and the cause should be ascertained.

One of the reasons why baby wakes up at night is because stupid and foolish nurses commence night training early in infancy.

In many hospitals, the three hour nursing procedure applies throughout the night as well as during the day. In others, a general rule is made that baby should be fed once during the night, at least.

CLOCK FEEDING IS STUPID

In practically all hospitals, there seems to be a fantastic idea that clock regulation of feeding is highly essential. To conform to this idea, nurses are in the habit of rousing baby because the clock says he should be fed. To keep to clock-like routine, they resort to night feeding.

The result is that a bad habit is formed. The spoiled baby results.

No night feeding should be the rule from the day baby is born and it should be followed throughout his entire infancy and childhood. Barring disease or unusual conditions, this no-night feeding principle should be applied even to the extent of refusing to feed him water.

Many mothers are in the habit of giving baby a nursing bottle of water when he wakens during the night.

Having the nipple in his mouth, he falls asleep. It is not because he has consumed the water, but rather because he has been humored into accepting a pacifier. The bottle filled with water acts more as a pacifier than as a means of satisfying any possible hunger existing. The same logic against pacifiers holds true during the night as during the day.

Mothers, who are feeding baby at night, the best advice that I can give you, is to break this bad habit at once. My further advice is, "Please let dad do it!"

CHAPTER XLVI

BABY THE NIGHT OWL

Frequently I visit the downtown section during the evening hours. As one walks along on any of the main streets one sees many children piloted by their parents at the hours of 8:00, 9:00 and even 10:00 o'clock at night.

Some are babes in arms. Others are a trifle older.

Mine is not the mission to preach of the destruction of the child's morals. The destruction of his health is so much more apparent.

It is indeed a pity that the tiny child is compelled to break his first instinctive, natural reactions because mother and dad must fulfill their social obligations, or satisfy their wandering or roaming inclinations.

To see a child under five in the downtown district, after the hours of darkness, or to see one in an automobile seat whirling through the streets, with eyes popped and wide, keenly awake, intensely interested, is to see the foundation of the neurotic tendencies which so often occur in later life.

AS THE TWIG IS BENT, THUS IS SHAPED THE TREE

It is an educational axiom that the habits, thoughts, and teachings of the child up to the age of 7 are more deeply imbedded in his system than are the teachings or education of after years.

This is the period when the child's mind and habits are highly susceptible to his environment.

The child and baby at this period may be contrasted to a soft bit of clay, unformed and unmodeled. The parents are the artists. It is up to them to fashion this tiny bit of human clay.

Sometimes they create a masterpiece. Most of the time, through ignorance and carelessness, they create commonplace products of the great mass.

It requires infinite care in the building of baby's habits. No course of procedure is too costly. Time expended should be a minor consideration.

The calmness of baby's nervous system is, perhaps, more vital than any other physical factor.

The child responds naturally to the same reactions as do the primitive animals.

It is the habit of the offspring of all animals, who are not nocturnal, to retire at sunset.

Notice the long hours of sleep of the new-born babe. It sleeps as much as twenty-two hours of each day.

He who robs a child of sleep robs it of a substance that is very precious in the building of a calm nervous system.

One of the causes of the fretfulness, irritability, and crossness of many children is the breaking into their sleep. Children should be in bed at nightfall.

In the winter season this hour would be early. In the summer later.

When the cold weather is present Nature wants to conserve the vital energies. Hence she creates long hours of sleep.

In the warmer weather, when the vital energies are not expended so rapidly, the hours of sleep are relatively shorter.

Until the age of 5 every child should obey the general rule of sleeping from sunset to well after sunrise.

Many mothers who themselves like to carry on a nocturnal social life do not like to be bothered by the early rising of their children.

I have gone into homes where two and three-year-old children were awake at 9 and 10 o'clock. The excuse

the mother gives is that otherwise sonny and daughter would rise too early, hence mother's rest would be disturbed.

This is exceedingly lax training. Granting, for argument's sake, that this mother has a good reason for keeping her child awake, still, there are several things of which she does not take cognizance.

EFFECTS OF LOSS OF SLEEP

First and foremost, she does not realize that the two or three hours that her child remains awake are responsible for a tremendous diminution of vitality, and a sharp increase of that vague condition called nervousness.

Secondly, the first hours of sleep are by far the deepest. During this time baby's slumbers are intense.

Physiologists have reckoned that of a ten-hour sleeping period the first three hours give 50 per cent of the recuperative benefit, and the other seven the balance.

Finally, mothers should realize that a well trained baby ought to be able to play by himself during the early hours of the morning. It is then that he is refreshed after his sleep.

Baby's bedroom or nursery should be away from the bedrooms of the rest of the family. A few toys should be handy for him to play with for the hour or so that mother wishes to secure extra sleep.

If mother would train him to accept a piece or two of fruit early in the morning, he could find this handy at his bedside when he awakens.

If he is old enough to take care of his eliminative necessities, there is no reason why he cannot do this without the assistance of mother. Children beyond the age of two and a half years should attend to their own wants when necessary.

I know many mothers who find it perfectly practical to sleep until 7:30 or even 8:00 a.m. and yet permit their children to get up when Nature dictates, a short time after sunrise.

What most children need is a dose of discipline and a degree of training.

What most mothers need is a modicum of knowledge and a good allotment of system.

Do not sacrifice baby's health by keeping him awake when he ought to be asleep.

CHAPTER XLVII

SLEEPING HABITS

The preparation of baby's bed is frequently misunderstood. Well-meaning mothers desire to make baby as comfortable as possible and interpret their own likes and dislikes as being similar to baby's likes and dislikes. They buy beautiful white cribs, fine fluffy pillows, soft, silken mattresses, etc.

This entire procedure is a mistake. There are definite well-established rules of common sense in the preparation of baby's bed.

WHITE BEDROOMS STRAIN THE EYES

Do not buy a white crib. If you already have one with a glaring white or cream color, have it repainted dark brown, dark blue or dark green. Babies stare for hours sometimes and white hurts the eyes.

Do not buy a soft mattress. Baby's mattress should be hard and firm, much harder than what you yourself would use. By no means have a pillow for him.

The proper preparation of his bed should be as follows in the order named: Mattress, rubber sheet, cotton pad, then a soft unstarched cotton sheet on which baby should sleep. So much for his bed. Next comes the preparation of baby for bed.

There are a few do's and don'ts which you should follow here also:

HOW TO PREPARE BABY FOR SLEEP

(1) See that baby is completely dry. It is almost criminal negligence to put him to bed with his shirt or napkin wet or soiled.

(2) Do not use abdominal bands after the first six weeks. Baby's clothes should be loose and never compressing, especially the abdomen.

(3) Do not encircle baby in a blanket. He should be covered and not wrapped. How would you like to sleep completely encircled by blankets with great lumps underneath as you turned or rolled? What is uncomfortable for you is uncomfortable for him.

(4) Do not put shoes or stockings on him during his sleeping hours. Baby should be dressed for sleep as follows: Next to the skin, a napkin and a cotton shirt, over this a cotton or a cotton flannel nightgown. That is all. His head should not be covered. Use sufficient light, warm covering to keep him warm but no more than just enough. It is much more economical to buy one thoroughly good blanket than half a dozen cheaper ones.

(5) Place baby's crib next to the window. If there is very much wind, merely surround the bed with a few blankets. But by no means shut off the fresh air.

CHILDREN SHOULD SLEEP "ABDOMEN DOWN"

(6) Finally, baby should always sleep with abdomen down.

Observe an animal in its sleeping habits. You will always note that its abdomen is protected. You will never see a dog sleeping with its feet in the air, nor a horse, nor a cow. The soft abdomen, containing the vital organs, is generally protected by being adjacent to the ground.

Recently, at a confinement, where I delivered a baby, I placed the new-born child, abdomen downward, in his crib. The startled mother looked at me for a moment as if she thought I was crazy. "Doctor! Baby will smother! He won't be able to breathe!" I smilingly reassured her and told her to watch.

The ten-minute-old baby wiggled a bit, turned his head to one side and went peacefully to sleep.

Abdominal sleeping will save an immense amount of gaseous colic. It builds strong muscles, keeps the abdomen warm, and assists in the discharge of gases.

Try it, mothers, and see what good effects it has.

CHAPTER XLVIII

SOOTHING SYRUPS

This past decade has seen a marked aversion to the use of foolish and stupid drugs for babies. The average intelligent mother, today, will not use dangerous soothing syrups. She knows its action and understands some of the effects on baby. The average physician, no matter to what school of healing he may belong, will not prescribe them.

It is a very easy and simple thing for the doctor, asked by the worried mother why baby continuously cries, to write a prescription including opium or laudanum in one of its forms. Yet, even though mothers have developed a distinct prejudice against soothing syrups, every physician knows that thousands of mothers are using narcotics for their children in order to secure a bit of peace for themselves and for their families.

"Baby just won't sleep," and the simplest measure that seems to present itself is to give him some sort of "dope" in order to accomplish the desired result.

SLEEPING AND SOOTHING SYRUPS ARE NARCOTICS

Those of you who are familiar with the anti-narcotic campaign, instituted by the various philanthropic associations, know that one of the fertile sources for commencing the narcotic habit lies in the addiction to sleeping potions.

In adult life, morphine and chloral hydrate are extensively used to secure sleep.

When mother goes to the drug store and purchases a sleeping potion for baby, she is subjecting him to the

same habit-forming drug that is so strongly stigmatized in adult life. If she knew that most of the dope used to "soothe" baby and to induce him to sleep contains powerful opiates—sometimes chloral hydrate, but usually laudanum—she would hesitate before ruining baby's body by these drugs.

The medical profession itself is recognizing the danger of sleeping potions. Consequently, those drugs, which, in former years, were purchasable at any drug store now must be secured by prescription only.

The mother who gives her baby paregoric because he is sleepless, restless and irritable should know that she is guilty of a terrible crime against her little one. Paregoric is definitely established as a poison, and is injurious to baby's vital powers.

The constipation so frequently encountered in children is sufficiently poisonous, not only to create the irritability, but to prevent the entire nervous system from securing the necessary relaxation in sleep.

Many mothers behave as if they were raising geese for the market. Their pride is in the quantity of tissue they can raise on baby, not in the quality of his health. If they were one-tenth as much concerned with the regularity of his bowel action, the nervous environment and the sensibleness of his diet, and less concerned with the quantity of tissue that they produce on baby's body, perhaps we would not have such a big problem in the form of sleeplessness.

GAS IS OFTEN RESPONSIBLE FOR SLEEPLESSNESS

When baby is cross, irritable, fretful and does not sleep, something is wrong. Ascertain what that is and apply the necessary remedy. Where his digestion is disturbed, the sensible thing to do is to thoroughly clean the bowels. Give him one, two or three enemas. Knead the abdomen until the gases have been expelled.

Give him water to drink. Let him miss a meal or two. He will not starve if he misses two or three meals.

Where his milk is excessively rich, dilute it more with water. Substitute the fruit juices for one or two meals, or if he be older, the natural fruit.

Don't excite him. Let his evening hour, just before retiring for the night, be calm, pleasant and quiet.

Many babies fail to secure a good night's sleep because daddy comes home an hour before they retire and insists upon exciting and playing with them so that when they retire their nerves are keyed to a high pitch.

If baby suffers from excessive gas, place some hot water applications to the abdomen until the gas tension is sufficiently relieved.

Give him sun baths during the day. Start with a minute or two and gradually increase the time. The sun will not only prevent rickets in babies, but will produce a healthy skin and furnish a vital something which scientists have not yet been able to determine, but which produces an ever-increasing resistance to disease.

CORRECT THE DIET

Finally, and more important than all, ascertain what mistakes are being made in baby's diet. There is no sensible reason for feeding sugars in baby's milk formula. The fruit juices contain an adequate supply of sugar in a natural and assimilable form for babies.

Sometimes the trouble lies in the fact that the milk is too rich in butter fat. The average cow's milk is almost 50 per cent richer in butter fat than is mother's milk. All milk, whether it be from the cow or the goat, should be diluted with distilled water to bring the butter fat content closer to mother's milk.

An excessive quantity of fat would of itself be disturbing to baby's sleep.

Sometimes the cause lies in the excessive consumption of refined cereals. The "cream" cereals, the extracted cereals, the precooked and predigested cereals are not fit for consumption by babies. The mere fact that they have been thoroughly cooked, the vitamins destroyed, and most of the mineral salts extracted, shows that they are starvation foods and that baby should not have them.

Find out the cause of baby's sleeplessness and irritability but don't, under any circumstances, under any conditions, at any time, or under anybody's advice, give him soothing syrups.

CHAPTER XLIX

PACIFIERS

To pacify or not to pacify—that is the question. Thus speaketh thousands of mothers every day and every night as baby cries and cries.

Time and again the temptation is present to use any possible means within one's command in order to "stop that crying."

The cries of the little one "gets on our nerves," for we are fast becoming a nervous, neurotic type of people.

We cannot stand the discord of baby's shrieks, and with characteristic indifference, we seek the easiest way which presents itself.

Some mothers who do not desire to resort to drug store practices, fool baby with the rubber pacifier, the nipple on the bone handle. Baby, believing the other end contains some nutrition, religiously sucks away and temporarily remains quiet.

PACIFIERS ARE A SIGN OF A "LAZY-MINDED" MOTHER

I have seen babies sucking for hours and hours upon a pacifier given by a lazy-minded mother. To keep baby quiet by such means is nothing short of gross criminality.

It is analogous to keeping the adult readers of this book quiet by means of gum chewing. Suppose each time you desired to speak, I were to thrust a piece of chewing gum into your mouth and insist that you chew and chew until all desire for talking had ceased.

Baby has no means of expression except his cry. At his first speech, to thrust the rubber pacifier between his jaws, suppresses his only method of expression.

PACIFIERS MALFORM THE JAW AND MAKE TEETHING PAINFUL

In a previous chapter I spoke of the malformations that occur when the jaws are being used far more than is essential to carry on the normal digestive processes.

Baby's entire body, at this stage of his development, is similar to an unformed lump of clay, the modeler being his mother.

The chronic, persistent use of pacifiers frequently leads to distortions and to painful teething. The cause of much of the crookedness in teeth-development may be directly traced to the pacifier habit.

If for nothing else than the possibility of these malformations which sometimes distinctly mar an individual throughout life, mothers ought not to be lazy-minded.

A normal baby does not cry continuously. Remember this. If he cries, it is an expression of his want or desire or, in some few cases, of a spoiled baby. Learn what these desires are.

An intelligent mother should differentiate the cry of hunger from the cry of pain; the moan of colic from the wail of the spoiled baby. The mother, more than the physician, should understand her own baby, for no two babies are alike. I cannot tell you what the cry of pain or of colic may be in your individual child. Mothers only can tell us that.

The use of the pacifier is a sign of the lazy mother.

CHAPTER L

THE ROCKING CHAIR PACIFIER

While I am on the subject of baby pacifiers and soothing agents, it may be just as well to discuss some other types of soothing agents besides the nipple pacifier and the empty bottle.

Were you to go with me into 90 per cent of our American homes, you would find tyrant baby ruling the household day and night. All he needs to do is to cry and at once mother or daddy seeks some pacifying agent to placate him.

DOES THE ROCKING CHAIR HABIT MAKE BABY DIZZY?

If they are of the more liberal and thinking type of parent they will be averse to the use of pacifiers such as nipples, bottles of sugar water, etc. Instead they will often give free action to a subtler kind of pacifier—the rocking chair. Here, to the tune of “Rock-a-Bye, Baby,” his Spoiled Highness is lulled to sleep.

Serious treatises have been written concerning the pros and cons of rocking baby to sleep. Our goody-goody theorists, most of whom have never had practical experience in rearing children, condemn the rocking chair practice.

They bring forth various arguments. Some claim that it disturbs baby’s digestive processes and often induces vomiting and regurgitation. Others claim that it makes baby dizzy—that he falls asleep as a protective defense against this dizziness. Still others claim that the soothing effects of rocking to and fro constitute

nothing but baby's victorious reactions to his petulant humors—that is, the sign of a spoiled baby.

On the other side we have the grouping of opinion that staunchly upholds the practice of rocking baby.

First, the claim that an institution that has existed as far back as records can trace must logically have merit in it. Pictures of cradles and actual cradles have been traced for many centuries. The instinctive reaction of mothers, whether they be the primitive savages of Africa or the cultured civilized woman of today, is to rock their babies.

What is the foundation of this instinct?

Finally, these same advocates claim that rocking gives muscular relief to the baby.

It is not my purpose to take one side or the other. These and many more arguments could be advanced, indefinitely, but they would avail naught. The fact is, there is a great deal of truth in both viewpoints. It would be decidedly wrong to arbitrarily state that baby should or should not be rocked. The coldly precise, so-called scientific mother who will permit her baby to cry strenuously for long periods rather than pick him up is wrong in her conduct. There is a physical need for baby's change in position and mother should recognize it.

MOTHER AND BABE ARE ON THE SAME PSYCHIC WAVE LENGTH

Again, there is something which doctors do not understand that goes on between mother and child. The only way I can explain it is to state that mother and baby are on the same psychic wave length. It is an indisputable fact that the offspring will recognize its mother, whether we speak of man or beast.

How many of you have noticed the unerring accuracy with which a young calf will find its mother in a herd?

All young animals, human or otherwise, derive a certain magnetic comfort and consolation in contact with the parent. The tiny kitten seeks to snuggle close to the mother cat. The new-born puppy does the same. The infant reacts in a similar manner.

The comfort and the subtle sense of safety that come when he is snuggled close to his parent are soothing and consoling. Often it is merely because of the fear instinct that baby cries. When he is lulled by the soothing action of the rocking motion he calmly and quietly goes to sleep.

Summing up, therefore, we may say this: The mother who never rocks her baby in her arms is wrong. Perhaps just as wrong is the mother who goes to the opposite extreme and raises a spoiled baby.

Baby is quick to recognize his parent's weaknesses. His occasional necessity for the cuddling contact to his mother should be recognized. But more than this becomes unnecessary in order to avoid the development of a spoiled and capricious child.

The intelligent mother will soothe her baby via the rocking chair occasionally, but will not permit the habit to become so firmly entrenched as to become a necessity.

CHAPTER LI

RUPTURE AND HERNIA

If all the adults who were ruptured or who had a hernia, as babies, kept this peculiar infant affliction throughout life, the business of selling trusses and supports would be gigantic.

Hernia and rupture are conditions very frequently encountered by the physician, particularly by the pediatrician or specialist in children's diseases.

UMBILICAL HERNIA

With the child, the commonest type of hernia encountered is what is known as umbilical hernia. Umbilical hernia is a protrusion of a loop of the intestines through the umbilical opening.

In a child this opening is comparatively weak, for closure and healing take place in the early days of baby's life. Being a newly closed orifice it has not the strength of other areas of the body.

When baby cries his abdominal muscles become tense and taut. The intestines are forced against the abdominal wall by the diaphragm muscle above. Considerable pressure is exerted against these muscles when baby cries long and strenuously.

If healing and the closing of the navel have not been very thorough and complete, the pressure is sufficient to cause a loop of intestine to protrude through the weakened opening. The result is hernia.

The next type of hernia in boy babies is of the inguinal type.

INGUINAL HERNIA

In hernia of this kind a loop of intestine is forced by abdominal pressure into the small opening which holds the spermatic cord, the support for the testes. Then, the intestinal loop is forced into the scrotum and a bulge appears in this area. Both inguinal and umbilical hernia are caused essentially by the strong muscular contractions of baby's strenuous crying plus constipation.

Fortunately both of these hernias are self-corrective and generally disappear as baby grows older. In both kinds, however, some assistance ought to be given Nature's effort to close the orifice and to draw the protruding intestinal loop inward.

TAPING IN UMBILICAL HERNIA

In the case of umbilical hernia, a practical method of procedure is to form a crease in baby's skin directly over the navel. Then tape both sides so as to maintain the crease permanently. By doing this a support is given to baby's abdominal muscles until such a time as healing occurs of its own accord.

This strip of adhesive tape may be changed every three or four days during baby's bath. It should be slanted in a slightly different position each time so as to prevent irritation to the tender skin.

All that is necessary in most cases is merely to see that the loop of intestine is retained in position. To accomplish this successfully baby should not be permitted to cry strenuously or violently for more than five or six minutes. If it is necessary to spoil him by doing this—then spoil him. His health is more important than his disposition.

Constipation, in the case of hernia, in children, should be rigorously avoided, for the muscular contractions, necessitated by constipation, frequently aggravate the hernia.

SUPPORT IN INGUINAL HERNIA

In the case of inguinal hernia, a different type of support is necessary. We cannot treat infants' hernia by the same truss supports so commonly used for adults. We must avoid irritation, and, at the same time, keep the intestinal loop in position.

For this purpose considerable ingenuity is necessary. Personally the best device I have found consists of a skein of wool about twelve to fifteen strands in thickness. This is adjusted between baby's thighs in such a fashion as to press directly against the protruding hernia, and is wound around his abdomen for support.

If you are familiar with the principles of bandaging, a "figure of eight" is really formed with the abdominal band used as anchorage. Before applying this simple home-made device, the intestinal loop should be pushed back into place gently and carefully.

Four or five of these wool skein supports should be on hand and they should be changed each time baby's napkin is changed. In this type of hernia, as well as in the umbilical kind, healing also occurs spontaneously. All that is necessary is to keep the intestinal loop in its proper position.

Both forms of hernia discussed are relatively simple types and ought never to involve surgical interference. Seldom do hernias of this type become acute; that is, seldom do they form what is technically called strangulating hernia.

FIRST AID IN STRANGULATING HERNIA

In strangulating hernia we are faced with a critical condition where the pressure against the intestinal loop is sufficient to prevent the passage of food. If it should occur, a few first aid measures will sometimes overcome the acute attack. The symptoms will be evidenced by

vomiting, signs of acute pain, swelling in the area of the hernia, associated with redness, inflammation and tenderness.

The objective should be to replace the intestinal loop. If this cannot be done with the fingers, grasp baby by both ankles and turn him upside down. Shake him vigorously and slap him on the "small of the back."

If these measures still fail to relieve the strangulated variety of hernia, while shaking him have some one else turn a spray of cold water directly over the herniated area. This has the effect of inducing quick contraction and sometimes will accomplish the results. If all of these first aid measures fail, the only recourse that is left is via the surgeon's knife. Then the surgeon must be relied on to correct the condition.

Most hernias are self healing if we but use the simple elements of sound common sense. Assist Nature wherever possible and she will respond tenfold with the reward of correction of abnormalities.

CHAPTER LII

EAR-WAX AND EARACHES

Barring diseased conditions, the accumulation of ear-wax is essentially due to habits of uncleanness. Our jokesters are constantly making puns about sonny and daughter because of their cordial dislike to having their ears washed. Without knowing it, perhaps in this respect, little Johnny is quite correct.

Wrong kinds of ear washing have caused considerable trouble to people who are bothered with ear-wax. Boys and girls who read this, do not for a moment think that I am opposed to washing the ears. What I am opposed to is the practice of getting into the deeper ear and cleaning out the wax.

Most of us have seen people take hairpins, toothpicks and, sometimes, the pointed end of a towel and strive to extract the wax. They succeed to a slight degree, but for each particle of wax removed, several times the quantity is forced into the deeper recesses of the ear. This accumulation undergoes hardening and causes irritation, pain and distress.

The ears should never be washed deeper than the tube leading inward. Naught but the external or superficial ear should be washed, and, by no means, under normal conditions, should ear-wax be extracted.

Nature hardens and permits the external portion of the wax to fall off. If you would permit Nature's course to go unimpeded, many of the painful ear symptoms would not develop.

However, when the hardened wax is already formed you have no alternative but its removal by a physician or by some other careful technician. An ear syringe

filled with water at body temperature is generally all that is needed. Have the patient recline so as to hold the water. Then have him turn on the opposite side and discharge it.

CHAPTER LIII

VOMITING

When baby vomits, what's to be done?

If mothers would remember that baby's stomach is but a very slightly enlarged pouch, differing only in minor detail from the anatomical structure of the small intestine, they would realize that baby's stomach capacity is very small.

Besides this, baby's stomach is supersensitive, responding by vomiting to the faintest variation in the chemical or nervous structure of the milk.

In short, baby is intolerant of anything but first-class food during his early infancy.

Some time ago an experiment was performed by having a cow, whose milk fed twelve children, repeatedly chased by a dog; that is, the cow was kept in a state of worry and fret.

Chemical tests were made each day of all the ingredients of the milk. No sharp, abnormal change took place. Physics or chemistry could denote no essential difference in the milk, and yet eleven of these twelve children became ill. The reaction with most of the babies was to vomit part or all of their usual cow-milk ration.

NERVOUS MOTHERS IMPART "NERVES" TO THEIR CHILDREN THROUGH BREAST MILK

The point I desire to illustrate is that, in many cases of chronic infant's vomiting, the fault lies with, and is due to the fretful, worried condition of the mother.

A certain well-advertised brand of milk has for its chief slogan, "Milk from contented cows." This firm has discovered a profound, physiological truth.

To be a successful mother from the purely nutritional standpoint, the mother must be contented. I am aware of the difficulties which confront most families in maintaining such a condition in the face of the multitude of obstacles productive of discord and unhappiness. Yet if ever there is a period in which mutual tolerance and forbearance is of paramount importance, it is the time when the mother is nursing her infant.

Milk coming from an unhappy or worried mother irritates the child's stomach. His physiological protest is vomiting, as is the case when he is overfed.

From this it will be seen that vomiting is a qualitative as well as a quantitative problem.

Therefore, if baby vomits persistently, change the mother's environment. Remove the cause of her worry and discontent.

CHAPTER LIV

CONVULSIONS

Of all baby's ailments which strike a vivid picture to our imagination, convulsions undoubtedly take the lead. To see the tiny body suffering excruciating agony, with muscles tense, face drawn and pale, to hear the moaning and crying, are things never to be forgotten. Even though the clinical picture of convulsions is one that is awful to witness, yet as a whole, the ailment is not so serious as appearances indicate.

Although it is baby's muscles that become affected by the spasm, yet basically, convulsions act on the nervous system, brain and spinal cord more than on any other area of the body. Consequently convulsions are classed in the nervous group of diseases.

The nervous system of the child is so delicate, so super-sensitive, so finely adjusted that it takes very little cause to upset it.

All small children are keenly sensitive to the nervous reactions of their parents; a nervous mother or even a nurse caring for her child will generally induce some nervous manifestation associated with her own tense condition. This is more markedly true in the case of nursing infants. Baby feels the nervous tension and excitement that mother undergoes.

CAUSES

In general the causes for convulsions may be divided into two main groups: heredity and those causes acquired during childhood. Children who come from scrofulous or syphilitic parents, or who were conceived while their parents were under the influence of liquor or

drugs, are more likely to convulsions than children born of normal, healthy parents.

There are other causes aside from heredity. In fact, heredity plays but a minor part in the production of convulsions. The mistakes and stupidity, the vicious treatment and poor care of baby—these are much more fertile causes than those produced by heredity.

Sometimes convulsions come when an acute infectious disease overwhelms baby, such as measles, chicken-pox, diphtheria, typhoid fever and others. More frequently, however, the cause may be traced to an irritation of the stomach or the bowels.

So often is this true that it is quite common practice for the doctor to consider convulsions as distinctly of digestive origin unless other factors are definitely indicated. Of course, under such conditions, the remedy suggests itself at once. Both stomach and bowels should be thoroughly cleansed—one by means of the stomach pump or wash (this should only be done by a physician or by a skilled nurse) and the other by means of the enema or repeated enemas.

If the convulsion is of digestive origin, all food, with the possible exception of diluted fruit juices, should be withheld. The stomach should be given an opportunity to cleanse itself and to correct its defects.

INTESTINAL PARASITES

Intestinal parasites are, without a doubt, responsible for an immense number of cases of convulsions. The irritating effects of huge masses of worms will produce a state of nervous tension and irritation of an extreme type. The only remedy is to get rid of the parasites and their eggs. Then discontinue the foods which will either harbor parasites or favor their development.

As a rule most of these parasites are introduced by

the consumption of meats or of meat products. Even though a child does not have convulsions or worms, meat is not necessary for his development or growth.

OTHER CAUSES FOR CONVULSIONS

Where the condition of phimosis has been permitted to go uncorrected to such a point that convulsions are produced, then there is no other alternative than circumcision, whether it be a male or a female baby. It is then too late to start the slow process of retracting the foreskin.

These are some of the causes. There are many others. A clot of blood on the brain, tumors of the brain, falls, blows, the pernicious use of instruments in child-birth—these and many others may be responsible for convulsions.

TREATMENT FOR CONVULSIONS

However, the treatment is of considerable importance. Where the cause can be ascertained, correction in that direction should be sought. When the attack occurs the child should be undressed and put to bed. He should be free from fond friends at that time and none but mother or nurse should stand duty at his bedside. Quiet is absolutely essential.

Icewater or cold water packs should be placed at his head while hot water bottles should be kept at his feet. Exclusive of the head, the rest of the body should be kept warm and comfortable.

Warm packs to the abdomen have been found of considerable value in furnishing the relaxation so necessary during the convulsive attacks. The bowels should be washed repeatedly until the water comes clean. Drugs should never be used as there is no drug known which can overcome the cause.

After a child has had a convulsion he should be kept quietly in bed for at least twenty-four hours and preferably longer. His diet should be extremely light. If he be a nursing baby his feedings, both in frequency and duration, should be considerably lessened.

If he be an older child, accustomed to solid food, he should be kept on nothing but water or diluted fruit juice for twenty-four to forty-eight hours at least. Always see that the digestive system is fairly clean and many of the responsible causes for baby's convulsions will be overcome.

CHAPTER LV

POSTURE AND FIGURE

Throughout the country baby shows are constantly being held. Notwithstanding that Nature, as a whole, attempts to give baby a birthright of good health and a good body, yet it is the rare exception for a child to secure a perfect rating in any of these baby shows. It seems that the causes of body disproportion and form disfigurement commence very early in baby's life.

Much of it may be avoided, much of it completely prevented if we but use some ordinary common sense discretion.

WHEN POOR POSTURE COMMENCES

There are a number of elements entering into the processes of misshaping baby's body. Most of them parents do thoughtlessly, unknowingly and, to a large extent, ignorantly.

I shall take up a few of the common mistakes made by parents.

For instance, the holding of baby. In his early infancy, when he is relatively helpless, too many parents make the mistake of holding baby in every conceivable position satisfying to the caprice or whim of the moment.

Baby is bounced on daddy's knee, curled over aunty's shoulder, crouched in mother's bent elbow, placed across grandma's lap and lifted high over head by his enthusiastic uncles. Instead of letting him alone in his flat, hard crib, he is tossed and thrown, handled and carried.

It is true that he is very flexible, and that usually little or no damage is done; but the faint beginnings of future false posture start here.

REST AND SLEEP POSTURE

When baby is resting, few mothers know the sensible methods of making him comfortable. All one needs to do is to visit a public promenade where babies are sent out for an airing.

They are propped up on pillows long before their weak spines are capable of withstanding their weights. They are kept in reclining positions until they commence to cry from the general discomfort. They are kept encased and wrapped with blankets because mothers are fearsome lest their babies get a breath of air through their clothing, with the result that the tiny feet have no room to kick, or stretch, or move. This, in turn, keeps baby's abdomen bent and frequently his spine curved.

When baby is home in his own crib, mothers like to pamper him by giving him soft, downy mattresses and silken cushions on which to lie. If mothers would but understand that baby is still only a tiny little animal enjoying the animal comforts, and not yet imbued with the luxury of our present-day civilization, they would change their behavior.

The pad on baby's bed or perambulator, at the time he is asleep, should be perfectly flat with no pillow. A fairly hard mattress should be used.

I have never seen an animal sleep with its abdomen upward. The abdomen is the soft spot of the body, the weak spot, so to speak, and, as such, every animal desires to protect it. The result is that all animals sleep with abdomen downward. Baby should also be trained from early infancy to sleep with abdomen downward.

How would you like to be rolled and completely incased in blankets, oftentimes with the lower end pinned

up so that the full stretching of your limbs was impossible? Yet, this is the way many mothers (fearful of that everlasting bugaboo that baby may not be thoroughly warm) prepare the baby for his night's rest.

Again, would you enjoy the night's sleep where your hands were pinioned in a blanket straight-jacket? Not very likely. Well, neither does baby. Leave his hands free whether he sleeps outdoors or indoors in cold or in warm weather. California weather never offers a chance for freezing baby's fingers, I assure you, and if his fingertips do get a trifle cold, no harm can come of it. Give him an opportunity to move, squirm and twist. This is baby's exercise.

ARTIFICIAL TRAINING TO WALK IS VICIOUS

Next I come to the most vicious crime of all in misshaping baby's body—that is, training him to walk. No mother has any right to teach her baby to walk, irrespective of how retarded he may be. One child will walk at ten months, another at two years. Both are fairly normal.

Children undergo a definite evolution in the processes of learning to walk. A mother who desires to develop a precocious child by teaching him to walk before his limbs are strong enough to do it ought to be punished by having her walk twenty-five miles when her capacity is ten.

It is almost a crime against baby's tender limbs to see a mother place baby in a piece of walking apparatus which supports him under the armpits while he makes a futile effort to learn how to walk before Nature has prepared him.

Next we come to some of the troubles of older children. For instance, the mother who goes downtown and who is in a hurry yanks her little one alongside of

her at a rate three times faster than his little feet can carry him. It is not rapid for her, but for him it is racing.

"THE BAREFOOT BOY"

I do not feel as if I can close this chapter without at least one thrust at some of my Nature-cure enthusiasts who go to the opposite extreme—bare-footedness.

Some people do not understand why their children's feet are awry or disproportionate even though they have permitted them to be barefooted from the time of birth. This is all very well in theory, but primitive Nature did not intend man to walk barefooted on hardwood floors, on concrete streets and on cement pavements.

We can experiment with any aborigine. Keep him in the country, on the soft grass or sand and his arches will function splendidly. Put him on the city streets in his bare feet and you will see his arches fail him.

No, my extreme friends of Nature cure, there is a time and place where children can go barefoot. That time is in their early childhood, the place is on the sand, soil or grass. For the hardwood floors and typical city surfaces you have no alternative, if you care for your children's arches, than the wearing of shoes.

Use common sense and it will generally guide you right.

CHAPTER LVI

THE NERVOUS CHILD

Often I run across the expression "bad boy," or "bad girl," and inevitably I come in conflict with the speaker. I say that there is no such thing as a bad boy or a bad girl. Instead we find the sick boy or the sick girl, abnormal, temperamental, ailing in body or mind. If we but understood some of the causes for their abnormal behavior we would not be so quick in leveling our criticisms.

We have abnormal children and subnormal children. Some are born that way, but I assure you that most of them have been made so through errors of environment and development. The care of the child is an exact science. The specialists who ought to understand this care should be mothers.

A child who is fed properly, surrounded by the proper conditions for development, with a background free from nervous discord, and kept in a fairly good physical condition will be a joy and a happiness to all about him.

Remove some of these factors and we at once go into the realm of disease or pathology. Yet there is no disease nor abnormality of childhood which does not have a definite predisposing cause. If we analyze those factors responsible for the health of the child, invariably we find the elements accountable for his defects.

In a rough fashion we may deduce, in terms of bare essentials, those phases of child culture which are responsible for most of his shortcomings. There are certain well-developed arbitrary rules, the abrogation

of which will inevitably produce disastrous consequences.

We have repeatedly dealt with the physical problems of child care. In this chapter I wish to bring up certain phases closely allied with the child's physical development, yet of a more intangible nature. I wish to talk of the nervous child.

NERVOUSNESS IS ALLIED TO HEALTH

His training and education come from his observations of his parents and of his brothers and sisters. This is the learning process, the means by which his development takes place. If he is surrounded by harsh words, careless language, discord, petty quarrels and that condition so popularly known as nervousness, the chances are that his development will be of a similar nature.

Every child is mental as well as physical. Equally as much as his body craves rest, quiet and the peace of sleep, in the same sense must his mind be free from the excessive excitement and stimulation which are often so detrimental to his calm and equilibrium.

The high-strung, nervous, cross and irritable child is often made so by the excessive stimulation and excitement produced by his parents, unwittingly and unknowingly.

Time and again, a mother will remark that her boy or girl is in splendid health yet of a markedly nervous disposition. Even though, in a finer sense, nervousness is a direct component part of physical health, often we find a body robustness associated with a high state of nervous tension. Apparently, there are other laws than the purely physical which govern this vague and intangible characteristic.

To make this subject clear in a popular fashion, we must make homely contrasts without being too pedagogical or didactic.

After the child is born, he is influenced almost solely by the conditions surrounding him. If these conditions be of a nature to induce a calm and quiet nervous system, the tendency will be for him to develop a similar nature. If, on the other hand, he is surrounded by tension, discord and lack of harmony, the probability is that he will suffer because of it.

A child learns more from precept and example, from the way his parents behave and act, from the conversations he hears and from the harmony, peace, and quiet that are present in the household, than from all the moral lessons and all the "do's" and "don'ts" which are preached and thundered at him.

AMUSEMENT IS DIFFERENT FROM EXCITEMENT

There is a vast difference between amusement and excitement. One is essential to growth. The other is productive of discord and hypertension.

In this blasé period of our development the child is an early victim to the satiety and fullness of excitement that fill the activities of every day.

There is no necessity for filling the daily program of a growing child with the stimulation, thrills and everlasting change which characterize the life of the average adult. There is no necessity for his being constantly "on the go."

The long automobile rides, the constant traveling to and fro, the excessive stimulation of motion pictures, the frequent downtown shopping visits, the neighborhood calls, the family visits—these and many other factors of constant activity are productive of a nervous tension that is more or less unrelated to direct physical causes.

THE CHILD'S PLACE IS AT HOME

In a broad sense, the child's place is at home when he is not at school. From the standpoint of his nervous system, the less he indulges in the jazzmania which is present today, the calmer and quieter will his nervous system be.

"Be free from nervous tension yourself," is an excellent bit of advice to give to parents before they can hope to have a calm child.

The mother or father who becomes cross, excited or provoked at the least provocation is not furnishing an excellent example for a child.

Calmness and peace of mind breathe the same virtues in those about one and before mother can see the correction of nervous excesses in her children she must first learn to control herself.

These are a few psychological factors. There are others essentially physical.

DIGESTION AND ELIMINATION GOVERN "NERVES"

One cannot have a calm, poised nervous system when the digestive system is loaded with toxic gases and uneliminated waste material. A body loaded with toxic impurities cannot be nervously calm, for in the waste materials of faulty digestion and elimination will be found one of the most fertile causes for nervous irritations.

If your child is nervous, ascertain if the digestive system is normal. Look deeply into the question of his diet. See if you are feeding him foods of the most wholesome variety. Be sure there is no gluttony nor dietetic excesses of any kind.

Observe his other habits. See if he is regular in habits of elimination. Watch his posture and control all developing defects. The abnormalities of poor breath-

ing, cramped lungs, bent spine, curved shoulders and distorted positions are of themselves sufficient to produce nervous hypertension.

Sometimes enlarged tonsils prevent normal breathing. Sometimes the development of adenoids does the same thing. In both cases correct the diet so as to eliminate the inflammatory and irritating process.

LATE HOURS PRODUCE NERVOUSNESS

Late hours and restless sleep are, without a doubt, a direct contributing cause to nervousness. In most cases, late hours for a child are due to lack of parental discipline. In some, it is due to excessive and unwarranted excitement. There should be no necessity for a curfew law.

Parents ought to understand that late hours for their children are productive of ill health and are detrimental to their nervous poise.

Poor sleep, that does not result in sufficient rest and body rebuilding, often is responsible for nervous depletion. Sometimes poor ventilation or insufficient fresh air will account for it. Sometimes too much bedclothing or too heavy bedclothing will prevent proper sleep.

Children should not be allowed excessive study at any time and practically no study during the night hours. There is no subject in child education in the public school or high school which is worth the strain to the eyes and the nervous system involved in night study. If I had my way I'd absolutely forbid all night study, irrespective of the mental development or the grade advancement of the child.

From a health standpoint, night study is positively injurious, more to the nervous system and to the eyes than to the rest of the body. Extreme quantities of home work should never be permitted under any conditions.

Excessive night reading, with its resultant stimulation to the imaginative faculties, tends to overstimulate the nervous system. Whatever reading is done at night, and there should be very little of it, if any, should be of the more placid variety, and not of the kind which produces nervous exhilaration.

These are but a few phases of a great problem.

CHAPTER LVII

THE DELICATE CHILD

Were we to have a dozen babies lined up before us, our mind's eye would make an instantaneous classification of almost every one. We would call this one robust, that one delicate, and so on.

WHAT IS A DELICATE CHILD?

Under the term "a delicate child" we include a great many types of physical abnormalities. When a child has not grown to apparently the average size, he is called delicate. When he suffers from one disease after another, he is called delicate. When he is listless, dull, tired, insipid, retarded, he is called delicate. When he evidences very little muscular force and exerts himself but slightly throughout the day he is known as delicate. When he shows little resistance to contagion and, when once down with a disease, lingers with it for a long time, again he is classed as delicate.

Such children, usually handicapped from the start, are reared with the utmost difficulty. More than any other group, they require a very large quota of intelligence in their handling. Fortunately, Nature is the greatest corrector of our mistakes.

Were even one-tenth of our delicate children doomed to live their lives in comparative feebleness and continuous disease, we would be a sorry race, indeed.

The care and management of such children often tax the efforts of mothers to the utmost. They are like a delicate hothouse plant, damaged by the gentlest breeze and destroyed by even the faintest variation of

temperature. Their care involves an excellent knowledge and a sound judgment of some of the elemental principles of child welfare.

REFINED FOODS ARE INJURIOUS TO DELICATE CHILDREN

A number of good rules should govern our conduct with such children. Their food should be of the simplest variety. The excessive use of sweets, refined starches, candies, soft drinks and refined mushes should be rigorously curtailed.

SLEEP IS THE BEST TONIC

Nervous calm must be maintained with children of this type. Exhilaration and excitement are detrimental to their general health. Sleep is all-important. No child ever gets too much of it, let alone the so-called "delicate child."

The hours for his naps should be regular and systematically maintained. Such children require heroic doses of fresh air in increasing gradations. Every means of inducing and encouraging outdoor play should be invoked as he grows older.

HIS PHYSICAL EDUCATION MORE IMPORTANT THAN HIS MENTAL

He should not be subjected to many of the formulæ of education that more vigorous children are compelled to undergo. His mental, literary and musical education should be deferred until his physical welfare is thoroughly provided for.

"CODDLING DOES NOT STRENGTHEN"

It is a great mistake to think that because the child is delicately constituted, he should be coddled. It is evident that he should be protected but that is quite a dif-

ferent thing from coddling. The overzealous nurturing should not be confused with the proper safeguards and precautions against his being subjected to disease. Protection is one thing; softening by lack of exposure quite another.

The maintenance of a delicate balance between these two extremes is something which requires a good deal of intelligence on the part of mothers.

SERUMS AND VACCINES DO NOT BUILD IMMUNITY

Above all, do not expect him to secure immunity from disease by means of artificial injections advocated by our "bugafobia" adherents. Resistance and immunity to disease are not built by the chemist's art nor by the mysteries of the bacteriologist. Inoculate your child from now until doomsday and it will not protect him one iota.

There is only one immunity, one safeguard against disease, and that is the building of a robust constitution; the subjection of the child to the natural laws of good health.

CHAPTER LVIII

WHEN BABY GETS IRRITABLE

Baby's means of communicating his pains and aches to us are extremely limited. He whines, cries, moans, turns, twists and squirms. It is up to mother to interpret these signs intelligently and to act in a sensible fashion.

There is scarcely a mother who at one time or another has not been confronted by the problem of a cross and irritable child. Often the mother herself becomes cross and irritable and her impatience increases with baby's constant crying. She frequently attempts to use adult psychology in attempting to suppress baby's whimpering and crying.

There are mothers who slap and spank a tiny child, largely because they do not understand the cause of the crying.

It is true, that in some cases, whimpering is nothing but a sign of a spoiled child, or the inheritance of a spiteful temper. This, however, is the exception rather than the rule.

Most children, for the greater portion of the time, will coo, smile, gurgle and be happy rather than be cross and irritable. Usually there is a physiological reason for baby's irritability.

THE SAME DIET FOR MOTHER AND CHILD IS STUPID

When we consider the colossal stupidity shown by mothers in feeding their children the wonder is that we succeed in raising the number of babies we do, let alone accounting for their crossness and the crying spells.

The other day, I was seated in a cafeteria. At the

next table to me sat a mother with her infant whom I judged to be eleven or twelve months of age. The mother's tray contained scrambled eggs, white bread toast, tea, grapefruit and two slices of bacon. Both ate from the same dish. The mother would take a small piece of bread, put on some of the "fried-in-grease" scrambled eggs and serve it to baby. Then, after each mouthful she would give him a teaspoonful of tea which had been thoroughly sweetened with white sugar. At the close of the bacon, scrambled eggs and tea meal, she served him the grapefruit. Baby's share of the meal was finished before mother's.

She had scarcely finished her meal when he set up a series of howls and cries which placed her in an exceedingly embarrassing position. Her methods, of course, were of the usual type of repression; threats—"hush"—"keep quiet"—and other admonitions.

Notwithstanding that she probably loved the tiny infant with all her heart, she little realized that the cause of his willful conduct was unquestionably due to the diet she had inflicted upon him.

POOR DIET BUILDS POOR CHARACTER

If we regard this as an example of her method of feeding at home, it takes no great stretch of imagination to know the *a f t e r y e a r s* of this child, as well as those of countless thousands of other children. He will be cross and irritable, and will be a "trial" to his parents. Harsh words will be repeatedly used, and the time will come when the element of fear will enter into the child's psychology.

Mother, instead of being the confidante and friend, becomes the enemy to be feared—some one, who always says, "Don't."

He will learn to hide things from her. He will learn to be crafty and subtle in his plans. As he grows older,

the processes weaning him away from home influences will become more and more pronounced.

Step by step, link on link, we build the chain of circumstances which cause unhappiness in the home and estrangement between parents and child—built upon a foundation of irritability caused by wrong diet.

If mothers would be a bit more patient and ascertain the cause of baby's irritability, if they were to calmly and judiciously reason the thing out, they would find that it is not baby's fault, alone, that he is so often "upset and out of tune."

Understanding and tolerance plus good physical care will help mothers as no other influences can in the development of a healthy and a mentally wholesome child.

CHAPTER LIX

WHEN BABY CRIES

Helpless and incapable of expressing his thoughts, baby is compelled to resort to the only language he is capable of speaking—his cry. From it mother must read his every want and wish and care for him accordingly.

In the same sense as we understand each other through the spoken or written word, just so much must mother understand baby by his language to us. Baby cries in various tones and each expresses its message to us. Mothers should understand these cries.

What sound does baby give when he is ill?

As a rule, it is more of a fret and is nearer a moan than a real cry, although the moan or whine may, under a slight excitation, become a severe cry.

What is his cry of pain?

Instead of gradually rising in crescendo fashion, it is sharp, quick, spontaneous and exceedingly strong. It is usually continuous and stops almost as suddenly as it commences. With it one may always observe the other evidences of pain such as a contraction of the muscles, a drawing up of the legs, and wincing of the eyes.

How does he cry in a fit of temper?

Then he is loud, strong, vehement. He kicks and punches, and stiffens his body.

How does he cry when he is "spoiled" or when he is habitually pampered?

This is a characteristic petulant cry of temper, starting with a short series of small cries with pauses in between, then gradually increasing in volume and tone

until he is at it, full blast. This is the cry of a very young infant because mother has spoiled him.

He cries because he wants to be rocked or because he wants more sugar in his water or a pacifier in his mouth or his thumb to suck on or because of hundreds of other bad habits which an unthinking mother has developed in him.

How much crying is normal and how much abnormal?

Two or three spells of five to ten minutes per day is quite normal for a child. He should cry to develop his lungs, to increase his abdominal strength. His crying, however, should, under no circumstances, last more than fifteen minutes. It is a genuine mistake to permit baby to cry to the point of exhaustion, to allow him to go on until his little body is so tired that he can cry no longer.

When is a cry abnormal?

When it is long, uninterrupted, to the point of exhaustion or far too frequent. It is seldom that the abnormal cry is strong and vigorous. Rather is it the long, continued moan and whine of distress. In most cases it is the cry of colic—the painful gases that distend his tiny abdomen so that sleep, rest, or body ease is almost impossible for him.

When baby moans and whines for hours at a time, rest assured it is abnormal.

What are the principal causes of abnormal crying?

Illness, gaseous distension, pain consequent to illness, temper, or the inculcation of habit.

Time and again, when baby's habits have been thoroughly spoiled, it ultimately develops into a matter of endurance between mother and babe. Invariably his

royal highness is the victor and mother uses any means within her power to hush him up. Thus his crying goes merrily on—normal and abnormal—some of it necessary but most of it entirely avoidable.

CHAPTER LX

TRAINING TO GOOD HABITS

I have stated in previous chapters that baby's intelligence commences almost from the time of his birth. He is far brighter than we give him credit for being. It is simply that he cannot express himself in intelligible language. Hence we do not understand him.

Educators have written libraries of volumes dealing with the educational training of the child. Practically all of them deal with the child who is able to communicate his ideas, and to express himself, at least to some degree.

In our relations with the infant, the only expression he has is of approval or of disapproval. When baby chuckles and grins, crows and gurgles, we know that he approves. When he squeals and screams, yells and twists and squirms we know that he disapproves.

This is decidedly a limited field of mental reaction. Nevertheless, it offers ample opportunity for the inculcation of proper habits in the training of baby.

TRAINING TO HABITS OF REGULAR ELIMINATION

The first routine habit that mother wants to instil in baby is, of course, cleanliness. The eternal washing of napkins, with many poor mothers who do not own washing machines, or who cannot afford help, is tiring and exhausting.

I have seen households where as many as twenty to twenty-five napkins per day would be soiled by baby.

To induce a regular bowel and kidney action is quite a problem.

In hospital procedure lazy-minded nurses give baby a suppository early each morning and force an artificial

bowel action merely to save themselves the task of changing napkins and of washing baby.

One of the best ways to induce constipation is to have the bowels move artificially. This is decidedly a poor way to train baby toward routine elimination at a definite stated time.

WHEN HIS TRAINING MAY COMMENCE

Baby's training may commence from the time he is 4 to 6 weeks of age. Immediately after feeding he may be placed over a proper receptacle to discharge the waste.

At this early age he is not strong enough to sit up by himself, but should be supported, for his back is not sufficiently powerful to hold up of itself. No chair is made or could be made which will supersede mother's hands in holding baby.

He should be held over a proper receptacle for fifteen to twenty minutes. It is disagreeable to him to have his body soiled, and it is instinctive to discharge wastes when his body is free from garments.

Sometimes children, in their efforts not to soil their clothes, will retain waste excreta for several hours longer than they would ordinarily discharge it. This has been found true repeatedly with older children.

There is a subtle instinct in all living things not to soil their own surroundings. If you have ever observed a bird's nest with tiny new-born birds in it, you will note that the tiny new-born bird will discharge its offal outside of the nest.

TECHNIQUE OF TRAINING

Hold baby, immediately after feeding, with feet flexed almost to the chest. This protrudes the rectal muscles and favors normal bowel evacuation.

This should be done three times a day, and may be

started very early in infancy. The most favorable time, of course, is immediately after his meal.

Again, as soon as baby awakens, he should be permitted to discharge his wastes. A delay of two or three minutes will frequently be too much.

Children who wet the bed are often *h a b i t u a t e d* to this practice from early infancy when mother refuses to permit them normal elimination *i m m e d i a t e l y* upon awakening.

Corollary with the *f o r m a t i o n* of this good habit comes the next good habit of *p r e v e n t i n g* baby from overeating.

If he be bottle fed, there will be a tendency for him to consume his milk as fast as he can take it. This should not be encouraged. A feeding for a bottle fed infant should last twenty minutes. Many children finish in five. The hasty eater is thus formed.

If he be breast-fed he should be taken from the breast two or three times during the first five minutes, and two or three times during the ensuing fifteen minutes.

The same rule should hold if he be bottle-fed. Give him a respite of at least twenty to thirty seconds before allowing him to resume.

This also gives baby an opportunity to expel gases which sometimes distress him while he is nursing. In many cases, the gas he ingests while eating is sufficient to cause the regurgitation, or vomiting of a portion of his food.

Slow eating also fosters better digestion, makes for better elimination, and for less gas formation.

These habits are easy to form in baby. The joy mother will get from her children will be in direct ratio to her love for them, and to the degree of good training they have. It is certainly worth the effort to have a healthy, well-trained baby.

CHAPTER LXI

DISCIPLINE AND MORALE

Sometimes a sort of guilty feeling comes across me after I have outlined a set of instructions for a mother to follow. It is like giving orders to one who is undisciplined, untrained and unskilled.

I oftentimes feel genuinely sorry for the difficulties that beset the paths of parents in their attempts to conform to sensible standards.

WHO'S THE BOSS?

In nine households out of ten, if you wish to know who the boss is, the accusing finger may be pointed to his Royal Highness, "little Snookums."

"Mother just can't do a thing with him. He is so strong-willed and so strong-minded. He wants what he wants when he wants it." He usually gets what he wants when he wants it.

The question of morale, discipline and training is perhaps just as vital and critical as the physical aspects of diet and hygiene.

"Baby just won't eat this or that" is a very common complaint. Or, "baby insists on having foods which are not good for him," especially because daddy or mother indulges in these foods.

PRECEPT IS BETTER THAN PREACHING

Mothers should understand that it is not so much what they say to baby as what they do in his presence that determines his conduct. I am personally acquainted with many households where diet reform is being followed for baby and the mother's difficulties are enormous.

Invariably, the trouble lies in the fact that one dish is prepared for baby and another for daddy and mother. All he needs to do is glance across the table and see that mother and dad are drinking coffee, eating pie, cakes, T-bone steaks and roast chicken—and poor, abused, unfortunate baby is compelled to conform to the simple standard advocated by myself.

What is the result? Baby rebels, and if I must say so, righteously and indignantly. I know that if I were a baby I would also raise a howl at such rank injustice.

What is the solution? Surely, not to succumb and give baby a taste of this and a taste of that, as so many weak, foolish mothers do. Baby must be disciplined. He must be trained. Then how?

THE "COMMUNITY" TABLE

One of the great mistakes made in the average family is the "community" table. Why baby should eat with the grown-ups, I don't know. There is neither necessity nor justification for it. In ninety-nine cases out of one hundred, somebody at that table has eating habits which one does not want baby to emulate. Yet, he is deliberately exposed, by precept and example, not only to the bad habits of eating but also to the stupid diet of the older members of the family who are supposed to be able to withstand some latitude in diet.

LET BABY EAT ALONE

Baby should eat alone or with the other children. Dad and mother should eat in the dining-room—baby, alone.

If there is no dining-room, the meal should be served with an interval between. Mother can see that baby is adequately served. She can also train him to good habits. A separate table for baby means that he will not

emulate the poor eating habits of his elders nor strive and cry for the foods which he is not permitted to have.

It may be a bit more work for mother to have baby eat apart but let me assure you it is well worth while. Not until a child is six, seven, or eight years of age should he eat with his elders and, in some cases, not even then, especially where the diet of parents and children are dissimilar.

THE "I D'WANNA'S"

Next comes the disciplinary question of adjusting baby's diet to mother's sensible dictates.

"I don' wan' any veg'ta'bls; don' wanany salad; I want 'tatoes 'n gravy."

This "I don't want" proposition is something every mother must face. The uncooked fruits and vegetables are vitally necessary for the little child. He should and must have them. Yet how can he be trained to take them?

In the first place, they should be flavored with a delicious and tasteful dressing. Oil, lemon juice and ample quantities of honey, tomato sauce, cottage cheese, peanut butter and various other ingredients should go to make up the dressings. A salad can be made delightful and tasteful.

ONE COURSE AT A TIME

When mother desires to discipline baby to like his vegetables or fruits or cereals, it is a genuine mistake on her part to put two or three courses at a time before him. Given a choice of three or four foods, baby will always choose what he likes and discard what he doesn't.

Baby's food should be served one item at a time—no more.

DON'T SUBSTITUTE

Do not substitute. If he says, "I don' wan' any salad—gimme 'tatoes," the mother who accedes is breaking the discipline. Rather let it be so much salad, so much of this, and so much of that, *unvarying*, unchanging. Because he has not eaten his salad is no reason to double the quantity of the food which he likes.

"HOVERING" MOTHERS

For disciplinary purposes, where baby is old enough to help himself, place the food before him and then completely ignore his meal until he has finished that individual dish. "Hovering" mothers who watch every mouthful with fear and tremulation should not be in the room while baby eats. Most spoiled babies use mother's presence as provocation for increased demands.

Time and again, some one else can feed baby a great deal better than mother. From the disciplinary standpoint the very intimacy and closeness between mother and child often act as a barrier against this same discipline and training.

Do not consider that you are training baby by forcing him to take food even though it is good for him. If a certain food is recommended, offer it to him. If he refuses, take it away but furnish no substitute.

DON'T FORCE

Above all, do not create antagonism by going into a controversy over the question. Force a salad down his throat two or three times and he will associate fear and hatred with it. Then forever after it will be an excruciating problem to get any of it into him.

NATURAL HUNGER IS THE ONLY HUNGER

Do not become hysterical or fearsome if he fails to eat. Natural hunger is something few mothers have

ever seen in their children, largely because they are constantly feeding them the refined foods and the sweetened foods which preclude hunger. When baby is genuinely hungry, I give you my sacred word that he will eat even if it is food which he dislikes.

But the big problem with baby is not baby. Most babies are afflicted with too much mother.

It is mother who needs as much discipline and training as baby. It is a fifty-fifty proposition.

CHAPTER LXII

THE "CHILD GENIUS"

At times one gets a good laugh out of the foolishness of many doting mothers. Sometimes, however, their vanity and desire to have baby respond only in terms of superlatives, border on the point of tragedy. Let me explain.

Early in baby's life we have mother's psychology in relation to his development. He must be the "estest" in everything.

"Mrs. Smith's baby had his teeth in eight months. Ah! mine must have his in seven months!"

"Mrs. Brown's baby was able to walk at the age of eleven months. My baby must walk in ten months!"

"Mrs. Jones's baby said her first 'goo-goo' at the age of eleven months; my baby said 'ma-ma' at ten and one-half months—see what a genius I have!"

And thus the spectacle goes on and on.

What I have just shown is a relatively harmless variety. Let the doting mothers dote and we can smilingly look on, for thus everlastingly is motherhood.

PRECOCIOUSNESS AT THE EXPENSE OF HEALTH IS WRONG

But when we find mothers attempting to push baby's precocity at the expense of his health, then I think it is high time that such parents should be taught that their own vanity and egotism should be submerged to the interests of baby's welfare.

The other night I saw a four-year-old child whose mother thought she was a genius. She could quote poetry by the yard, verbatim, in monkey-like fashion

exactly as taught by the mother. The poor little creature had hardly an original idea of her own. She dared not turn, look, nor smile, for fear that her mother's pervading individuality might fail to give its official sanction.

Poor little genius kiddy! The foolish mother, in the attempt to make her outshine the others, was subjecting her poor little baby to a rigor of needless training and to a submerging of individuality that will in later life, leave her spineless and shorn of initiative.

Oh, deliver me from those mothers who want to make perfect little ladies and perfect little gentlemen of their little ones. It makes me gnash my teeth in rage to see these perfectly trained automations and splendid paragons of adultish chatter, live symphonies of repression and perfect expositions of their mother's stupid expressions.

A CHILD CANNOT BE AN ADULT

A child should be a child and not an adult. There is neither sense nor reason in making a child ape an elder in customs or in mannerisms. Often when I am compelled to listen to a child "genius" exposing his wares in public, I feel as if I want to tell that mother to take her baby home, put him in a pair of overalls, turn him loose in a sand pile and for heaven's sake to postpone his "geniusing" until he is of a fit age.

The precocities of a forced mental development, which so many parents inflict upon their children, make me sometimes feel as if I would like to take the parent and subject her to the same torment. The recitation of stupid, meaningless pieces, the cluttering of the brain centers with rote learning which has little meaning to adults and much less to the tiny child, is a torment that ultimately robs the child of his individuality.

When I see such a spectacle, I am tempted to suggest that the parents spend exactly the same length of time in studying the Einstein theory of relativity as they devote to this stupid and senseless training. At least, if nothing more, Einstein's theory might give them some mental discipline, but to most of them it would be rigorous torment and torture. Then they would understand to what they are subjecting their child.

Please, mothers, do not contrast your child with any other child. Get this "living up to Mrs. Grundy" out of your system. Let your baby be an individual unto himself with his own failings and virtues, with his own brilliancy and his own stupidities.

Why should you be so infernally egotistical as to fashion him after yourself or after somebody else's child? Stop trying to make a genius of him. If he is a genius, it will come out irrespective of your futile efforts.

Keep his training commensurate with his years. Let him grow naturally, not stunted and dwarfed in individuality or mentality. Give him a chance, instead of thrusting down his tiny brain stupid niceties of social inanities and conventional absurdities. Let him first and foremost be a child. Then if Nature has decreed it so, if he has the stuff of which men are made, the fibre of a genius, then genius will come.

The child genius, trained and created by doting parents, is a monstrosity. The time for genius is when it can be borne—when the shoulders are broad and the strength is present.

Weaken not the tiny little frame with a growth that is forced, unnatural and artificial.

Again, let a child be a child with the glorious simplicity of childhood. That is infinitely more wonderful than the stupid compliments of the conventional Mrs. Grundy.

CHAPTER LXIII

TRICYCLES AND KIDDIE CARS

Recently a mother came to me with a child who was listless, tired and indifferent. The mother was quite an intelligent woman. The child had been brought up in a sensible manner. She was bright and, to all outward appearances, seemed to be normal. The diet was good and the home environment excellent.

As the mother explained, the child would on every occasion, mope until she "got on her nerves." There was no disease so far as I could ascertain. What was wrong?

A little careful questioning as to the child's daily conduct and habits brought out some conditions which readily accounted for this lassitude and inertia.

The mother was proud of the charming appearance her little girl made. She dressed her in ruffles and laces, and just "doted" on her cuteness.

"NICE" CLOTHES FOR NICE GIRLS?

"Little girls must not soil their nice clean dresses"; this was the admonition that this little one had to heed and obey. In the school yard and playground, when the rest of the tiny tots frolicked and leaped and jumped, this little one had to remember her starched linens and fluffy ruffles or mother would scold when she returned home. Since mother lived in a nice, respectable neighborhood, of course it was necessary that the little one be clean. Consequently, "Don't do this and don't do that," was the constant admonition.

You are all thoroughly familiar with the "don't"

type of mother—slaves to their neighbors' opinions who, at any expense, must live up to their neighbors' ideas.

This child, as well as innumerable other children, was not in need of cod liver oil and iron tonics. Kiddie cars and tricycles—they were the only medicines she needed. To go bouncing and hullabalooing up and down the street, to go riding and pushing—this was far more essential than starched dresses and fancy frills.

A sand pile and a swing in the back yard, a tricycle and a kiddie car to expend the surplus energy, and, last but not least, a pair of old coveralls in which to run and jump, and skip and play, and slip and fall, and laugh and cry.

Why in the name of the seven hills of Rome a mother wants to make a "perfect lady" out of a wee tot, is incomprehensible to me. How much more charming is that lithe and active body with the glistening eyes and the glow in the cheeks—all of these are well-nigh incompatible with fancy laces and pretty dresses.

EVERY SMALL GIRL SHOULD, IN A SENSE, BE A TOMBOY

Every girl should be a tomboy until the age of puberty. Until that age there is essentially no difference in the physical development of boy and girl.

It is not enough for you to say to your boy and girl, "Go out and play." Their ingenuity is great, but not always great enough to keep them constantly active. They must be given every inducement to play—sand piles and swings, tricycles and bicycles, roller skates and coaster wagons.

A normal, healthy child should play so hard that, when night comes, he will lay his weary head upon his pillow, and, within a few minutes, be claimed by the sandman as his own.

CHAPTER LXIV

AS MOTHER TALKS

Eternal vigilance is the price of good breeding.

Eternal vigilance over the petty faults and laxities of action which many of us practice before our children.

"Ah, but baby does not understand. He is too young."

What a mistake! Baby knows much more than we give him credit for. He understands, he feels and, above all, he reacts to those about him. Merely because baby finds himself incapable of expressing his thoughts in definite terms of language is by no means adequate justification for assuming that he does not understand.

Mother's language, conduct and behavior ultimately become baby's habits and breeding. What I have to say here holds true with dad or with uncle or sister or brother—in fact, with all who come in contact with him.

Baby's learning comes from imitation. Almost from his birth, impressions of those about him, especially his mother, play their part in molding his character.

We have many types of conduct which distinguish parents. It is more the exception than the rule to find parents with the calmness, sanity, intelligence and training that foster good breeding and good habits in a child. Child training is left almost exclusively to instinct.

Anything and everything goes according to the whim, caprice, mood, physical or mental condition of mother. If she be in good humor and pleased with herself or baby, in all probability, you will find conversations like this:

"Is mamsy's little darling so sweet and booful? Oo's 'ittle toes is so pink and booful. Mamsy 'oves the best-est baby of all. Why does mamsy's darling baby cwy?"

Or perchance if the pie she ate for lunch "disagrees" with her, it would go something like this:

"That child is just driving me mad. I can't stand it any longer. If he doesn't stop his squalling I'll take him across my knee and give him the worst spanking he ever had."

And thus it goes.

It is very unfortunate that parents are unaware of the extent of the reaction that takes place because of the extreme nervous tension to which unthinking parents subject baby.

If we gave baby credit for a deeper power of understanding and, above all, for his extreme faculty to mimic his parents, we would be much more guarded and cautious in the type of language we used in his presence.

ENVIRONMENTAL INFLUENCES

After baby's birth the hereditary factors are already fixed. From then on he is subject exclusively to his environment and above all to his parents. Carelessness is a crime not only to baby's nervous system, but also to his future mental and moral breeding, to his poise, to his self-contentment, to his freedom from irritation and many similar factors necessary for baby's stability and normal growth.

The injury that is done when baby becomes conscious of harsh, discordant conversation of those about him is more than parents can really appreciate. The irreparable harm done by neurotic mothers when they address their children in harsh, discordant language is also more than parents fully comprehend.

Baby's nervous, mental and moral breeding is made up of innumerable details and no greater caution can be

given to parents than the advice of eternal vigilance. It is largely because of this type of behavior that physicians and psychologists are aware of the nervous and the "bad" child.

At birth every child may be considered, from a developed mental standpoint, as capable of virtually any potentiality. He may be compared to a mass of clay in the rough, to be shaped and fashioned by the artists, his parents.

The purely physical factors of nutrition and body care are not the sole essentials toward molding this unformed potentiality into the fully developed normal, rationalized human being. Full and ample consideration must be given to the mental and psychic factors as well.

GOOD CHARACTER-BUILDING IS AS IMPORTANT AS GOOD BODY-BUILDING

It is of little avail that a child be well formed physically. A rounded character, one that can take his place in the social organization as it is now constituted, must be thoroughly rationalized and normal from a physical, mental, moral and spiritual aspect. One without the other creates the abnormal individual. One type of development dominating the other creates the misfit.

It is only as parents recognize the completeness of all these phases of child culture that they may secure the maximum of satisfactory development for the child.

So, those of you who are eternally vigilant to see that baby's physical wants are satisfactorily prepared for, take heed of something just as important. Be eternally watchful of baby's mental development and of his spiritual welfare. Be careful what you say in his presence, and, above all, be cautious of the language used directly to him.

PART II
THE DIET

CHAPTER I

THE IMPORTANCE OF NURSING

First and foremost comes the feeding problem. The new-born infant differs but slightly from any other new-born animal in its reactions. His nutrition will, to a major extent, determine his health.

Like them, if he be fed properly, sleep normally, eliminate adequately, and evidence no signs of pain or discomfort, he, too, becomes a healthy little animal.

The primitive birthright of any child is a square deal from the start. A child is inherently entitled to the breast milk of its own mother, not that of another mother, nor that obtained by taking away the calf's birthright.

ARTIFICIALLY FED BABIES HAVE A LESSER CHANCE TO LIVE

Of every thousand children who are born today, 170 will be dead at the end of a year. Of this 170, ninety-seven per cent are artificially fed. These are indeed terrible mortality statistics, and point to the conclusion that the mother who deliberately and willfully refuses to nurse her infant is jeopardizing its life and health.

Forty-five per cent of American mothers successfully nurse their children beyond six months. The other 55 per cent come under the following groups:

(1) Those mothers who, because of inadequate physical preparation for parenthood, find themselves physiologically unable to continue nursing.

(2) Those mothers who, for economic reasons, being compelled to seek employment, must stop the nursing process.

(3) The small group of mothers who, for social reasons, substitute the cow for their own motherhood functions. These mothers are the most culpable of all.

Nursing a child is the most essential feature of its infancy. Yet, even in this natural process, we find abuses, due to ignorance and to lack of understanding.

The mother who puts her infant to the breast each time it cries is making a mistake. It is possible to overfeed with her own milk equally as much as with cow's milk. Her infant may become constipated and ill just as truly as from artificial feeding.

MOTHER'S MILK IS A REFLECTION OF HER OWN HEALTH

The milk of a nursing mother is a reflection of her health. If she be constipated, nervous, worried, the child will become constipated, nervous and restless. Her diet is equally as important as the infant's. She cannot eat what she pleases and produce a wholesome milk supply.

The idea that milk produces milk is erroneous just as much as that muscle produces muscle and that brain produces brain. All foods, when taken into the digestive system, break up into their component parts.

Milk does likewise. It constipates and clogs. Frequently it prevents the very thing it was intended to do. That is, due to its constipating qualities in the adult, it prevents the glands of the mother from secreting.

The diet of the nursing mother should consist of approximately 30 per cent to 50 per cent of fresh and dried fruits, 20 per cent to 30 per cent of raw and cooked vegetables (cooked, baked, or in the form of soups). The balance should be whole grain bread or cereals, nuts, and a very small quantity of dairy products.

These not only foster health in the mother, but produce an ample milk supply. The cow is perhaps the best illustration. On a diet of greens and some grains she produces prolific quantities of wholesome milk for her young. The human mother may do likewise.

A nurse who had charge of 2,000 babies annually in a large London hospital, told me recently that months would go by without a single case of infant's colic. When I asked her for the secret of this success, she tersely replied, "Feeding four hours and upwards."

Infant's colic, or gas in the digestive system, is unnecessary and avoidable. Two things produce colic—overfeeding and wrong feeding.

NURSING THE NEW-BORN

When a child is born it should go at least twelve hours and as long as twenty-four hours without food to permit it to discharge the fetal fluids. During the first two weeks its feedings should be three hours apart. After this, four hours should be the minimum feeding period.

By minimum feeding period is meant that, if the child be awake at the close of four hours or nearly four hours, he should be fed. If, however, he be asleep, always remember that sleep is more essential than food.

SLEEP AND NURSING

Frequently parents are advised to waken a child to feed him. The theory is that regular habits of feeding are established. This is a mistake. Sleeping habits are far more essential than eating habits. A new-born infant should sleep 22 hours a day. Like the birds he should sleep from twilight to dawn. However, under some circumstances, a feeding as late as 10 p.m. will frequently be practical.

When the infant's body requires food, you may rest

assured that he will a w a k e n and lustily d e m a n d it. There is no sense in forcing him to take food when his body requires sleep instead. Sleep is Nature's greatest invigorator!

Give the child his birthright—the right to the milk of his own mother! Give him the right to those fundamental things of life which no other animal in living Nature denies its young!

CHAPTER II

A NURSING MOTHER'S DIET

It is a startling indictment against American mothers that records show so much failure in the all-important motherhood function of nursing. All authorities agree that the terrible mortality statistics are due largely to the inability of the modern, highly-refined, nervously keyed-up woman to nurse her baby.

There are many aspects to this question. To be a successful nursing mother requires a great deal more than merely an intelligent understanding of diet, important though it may be.

Most mothers do not become incapacitated from nursing exclusively because of errors of diet. Rather it is because of definite toxic conditions of the body, overwrought nervousness or the onset of diseases in either mother or babe. All of these must be taken into consideration. In this chapter, however, I am more vitally concerned with the proper diet for a nursing mother than with the other phases of this problem.

VARIOUS DIETS SOMETIMES PRODUCE ADEQUATE MILK

As I travel about and interview patients, a diversity of opinion is presented to me. Here, I find a woman who successfully nursed her baby for a year or fifteen months and paid no regard to diet. Again, I find case after case where the most scrupulous attention was paid to this question, yet, nursing was relatively unsuccessful.

There is no definite single thing which will produce successful nursing. Rather, it is a composite, the grouping of diet together with many other factors, which make a successful nursing mother.

Some women tell me that they drank huge quantities of milk and were successful in nursing. Others, again, drank equal quantities of milk and made complete failures. Some drank considerable quantities of cream, coffee, near-bear and other fluids, and succeeded, while others did the same and failed.

You will see merely from this brief presentation that the problem of nursing is individual, racial, environmental, and subject to many conditions and influences. You will also see from this that it is virtually impossible to dogmatize and say that such and such shall be the diet of the nursing mother.

There are, however, certain fixed laws which determine the capacity of a mother to nurse her child. It is a fact that a mother cannot successfully nurse when her nervous system is tired. She cannot nurse when undue sexual demands are made upon her. The female of every species (except the human) remains sexually continent while nursing her offspring.

A mother cannot nurse while she is suffering from an acute or infectious disease. In short, her nursing capacity is directly proportioned to her health and to her general well-being.

Consequently if we must answer the question, "What shall a nursing mother eat?" the answer must revolve around health considerations—that is, the diet at which her body functions best is the diet for her during the nursing period.

IS MILK DESIRABLE FOR NURSING MOTHERS?

A few facts along this line must, however, be taken under consideration. Milk is formed by certain elements in the blood. The fatty portion of milk is pro-

duced by the fatty formation of certain cells in the breast glands.

When the blood is clean and free from nervous disturbances, it is possible for good milk to form. When the blood is charged with the foul toxic wastes of poor digestion and elimination, it is impossible for a good and adequate milk supply to be produced.

Since milk is a liquid food, it is very logical to assume that considerable liquid must be absorbed by the body. Speaking dietetically, the mother should consume an adequate amount of liquid, preferably in the form of fresh fruits.

On this point, most mothers make a genuinely serious mistake. Their doctor tells them that they must drink huge quantities of milk, merely because they are nursing a baby. Their assumption is that milk forms milk. In the complete ignorance of normal physiological processes, mothers assume that the milk travels in an unchanged form directly from the stomach to the breast glands.

I can find no other reason why mothers should consume three or four quarts of milk per day. Some people take milk very well. Others are thoroughly constipated by it and their digestive functions retarded.

A SENSIBLE SCHEDULE

A schedule which I have found to work out ideally is something as follows: Seven in the morning, a choice of fresh or dried fruits and nuts. Ten o'clock, fruit juices—that is, oranges, figs, prunes. Noon lunch, raw salad, baked potato, soup, bread and butter. Mid-afternoon, choice of fruit juices or milk. Evening meal, raw salad, cereal, and a choice of liquids.

A diet such as this, in adequate quantities to satisfy hunger, will be of considerable help in maintaining an

excellent degree of health and, with it, an adequate supply of milk.

As a general rule, those foods which are detrimental to health, are usually just as injurious to the nursing functions. Therefore, practically all my nursing-mother patients are forbidden the use of meats, fish, eggs, coffee, tea, sugar in any form, or of white flour in all its multitudinous varieties.

CHAPTER III

PREPARATIONS FOR NURSING

Even though the filling of the breast comes as a natural sequence of childbirth, yet the infrequency of successful nursing through the entire period of baby's early infancy indicates that preliminary care and attention are absolutely necessary.

The breast begins to secrete milk shortly after baby's birth, but the functioning of the glands has commenced considerably before the birth of the child.

During the later months of pregnancy, especially, the breasts undergo considerable enlargement and secrete a kind of yellowish substance called colostrom, which resembles milk but slightly.

It is the forerunner of the future breast milk.

It is during this period that proper care and attention to the breast will frequently determine whether or not the mother will be able to nurse baby.

WARMTH AND PROTECTION ARE NECESSARY FOR THE BREASTS

If her life has been sedentary and inactive, with little or no exposure, the breast should be kept warm on practically all occasions.

Instead of this, we find the low-cut waist, so often used by women, irrespective of the fact that they are about to become mothers.

This form of waist chills the exposed portion of the breast gland and leaves the nipple and under surface protected. It would have been far better, scientifically speaking, to expose the entire breast, rather than a part, for it is because of the uneven temperature on different portions of the body that colds occur.

BREAST BINDERS PREVENT NORMAL DEVELOPMENT

Next we find the popular binders which most women wear, pregnant or otherwise.

Suppose you were to bind your hands with the same pressure that some women bind their breasts. How much activity would your hands be capable of, were you to continue this practice during all the waking hours and sometimes during sleep? It is self-evident that such a practice would injure the hands.

You may then conceive how much more injurious such pressure would be to the sensitive, delicate, secreting breast glands.

No structure can grow and attain the normal physiological development necessary for normal function when it is tightly bound.

I have seen, in my practice, women who bound their breasts so tightly as to completely deform themselves for the nursing function and also for later life.

Even those women who deprecate the nursing function and are willing that the cow assume the foster-mother functions for them, would undoubtedly do away with the breast-binding habit, were they to realize the later possibilities of malformations, such as pendulous breast, sunken nipples, tumorous growths, etc.

The savage, uncivilized woman does not bind her breasts during pregnancy, and, consequently, succeeds in nursing her children, sometimes for two years.

Auxiliary feeding is relatively unknown to her and she frequently has sufficient milk, not only for her own, but considerable to spare.

There is a direct relationship between the breast hygiene and the success of baby's nursing.

There is also undoubtedly a direct connection between this hygiene and the ever-increasing number of breast tumors and cancers that are occurring among the mothers of today.

CHAPTER IV

NURSING TECHNIQUE

In the previous chapters we have thus far discussed some of the questions concerning what to feed baby. I believe it would be apropos at this time to fill in a few of the phases of feeding technique.

Even the mother who is nursing her little one must understand the technique of nursing, for it is not entirely a matter of instinct.

I do not need to repeat here that the mother should not put the baby to her breast each time he cries.

PERSONAL CLEANLINESS IS ESSENTIAL

Not all mothers understand the laws of hygiene and cleanliness. Many of them are exceedingly lax in their bathing habits. When baby is put to the breast he should, at least, put a clean breast nipple in his mouth. Wash the breasts in lukewarm water with a clean cloth or sterile absorbent cotton before each feeding.

Our medical brothers insist on boric acid washes. This I believe unnecessary, as the taste of boric acid in the child's mouth is undesirable and inflammatory.

BORIC ACID IS NEITHER NECESSARY NOR USEFUL

Nor, for that matter, should baby's mouth be rinsed with boric acid as is recommended.

There is no necessity for cleansing baby's mouth. The mouth fluids are those Nature intended to be there and boric acid or any other antiseptic is an exceedingly poor substitute. Any antiseptic strong enough to destroy bacteria is most assuredly strong enough to injure baby's supersensitive tissue.

Antiseptics should not be used for either mother's

breast or for baby's mouth. Ordinary careful cleanliness is all that is essential.

BABY GETS MOST DURING THE FIRST FIVE MINUTES' NURSING

Careful weighing experiments have been conducted to show the relative quantity of breast milk consumed during each period of the nursing time. It has been conclusively proven that baby consumes two-thirds of his entire nursing during the first five minutes. It is then that he suckles hard and quickly.

It is then also that he takes in considerable quantities of air which often become distressful.

PERMIT HIM TO EXPEL THE GAS

When baby has nursed four or five minutes he should be taken from the breast and placed over mother's shoulder, abdomen down. He should then be gently patted for a few moments in order that he may bring up whatever gas is within. This should be repeated two or three times during a twenty-minute nursing.

ASLEEP ON THE JOB

Very often babies will fall asleep at the breast. Whether this should be permitted or not depends entirely upon the habits and reactions of the individual child.

If baby falls asleep at the breast and then awakens at the close of an hour or two after nursing with apparent symptoms of hunger, he should be kept awake at least during the first ten minutes of nursing.

This may easily be done merely by changing his position. In any event whether he awakens or not, much before his next feeding, he should be kept awake to nurse for at least the first five minutes.

HOW TO HOLD BABY DURING NURSING

Young mothers, especially with their first-born, are filled with fears in holding or lifting baby. One would think baby were a glass doll judging from the way in which such mothers hold him. A rubber doll would perhaps be nearer the truth.

Because of these fears of injuring him, they turn little Snookums on his back or side, lie down beside him and thrust the breast into his mouth.

This is decidedly poor technique. A tiny infant's muscles become cramped in one position. He must have change. Lying down, especially on his back or side, becomes monotonous and tiresome. Besides this, a nursing with baby on his back is difficult and unpleasant.

The mother does not like to consume food in a prone position—neither does baby. Further, this position prompts vomiting as it is against gravity.

Baby should be held in mother's arms during his nursing period.

The nursing process should take place under calm and peaceful circumstances. The mother can nurse baby best in the privacy of her own room. Baby is extremely sensitive to discontent, noises and harsh sounds.

If baby be nursed at night, the glaring electric light should not be turned on—nurse him in the dark. If it be day, he should be placed in the shadow and not with his face in the sunlight.

These are but a few nursing hints.

CHAPTER V

THE NERVOUS INFLUENCES GOVERNING THE QUALITY OF MILK

You have heard me eulogize mother's milk as contrasted with the other methods of child-feeding. I have stated that a relatively inferior mother's milk supply is superior to artificial feeding. This statement requires some qualification and considerable explanation.

After all, there is a period when mother should change baby's dietary.

Most women are in a state of continuous high nervous tension. This nervous tension plays a direct and important part in the quality of mother's milk.

If one were to make a chemical analysis of the milk and find every chemical element present it would still be no indication that mother's milk was satisfactory.

There is an element in milk which transcends chemistry. It is the relatively unknown vital factor impressed on the milk cells by the nervous condition of the mother.

In other chapters I have stated some of the symptoms for which mothers should seriously consider weaning baby. I mentioned such factors as loss of weight, loss of vitality, continued hunger cries, sleeplessness and marked irritability.

ONE OUT OF FIFTY ARE NERVOUSLY POISED

There is one more element which, perhaps, plays as vital a part as those I have mentioned; namely, the nervous factor. It is a sad but truthful statement that not more than one out of fifty women are nervously fit to nurse their babies.

From the standpoint of nervous calm and complete

peace of mind, when mother's tenseness and state of fear and worry become important to baby, irrespective of whether baby is physically gaining and otherwise fairly normal, it is high time that she took action.

She should either attempt to calm herself and gain control over her nervous system by removing the cause of irritation or she should begin to substitute supplementary feeding.

Each drop of milk that flows from the mother's breast is a perfect replica and re-duplication of her physical, mental and nervous condition. A realization of this should make women less nervous and more fit for the nursing function of motherhood.

CHAPTER VI

TYPES OF MILK

Milk logically forms baby's principal food. But, before we can fully understand the reactions of milk in the infant's stomach, we must understand what milk and some of its by-products are.

The average cow's milk contains about 87 per cent water and 13 per cent solids. These solids are divided into 4 per cent fat, 4 per cent casein and albumin, which is the protein part of the milk, $4\frac{1}{2}$ per cent milk sugar, and a fraction over $\frac{1}{2}$ per cent of mineral matter.

TYPES OF MILK AND MODIFIERS

Milk fat and cream are not necessarily the same. Cream is simply the top layer of the milk containing a good portion of fat.

Milk sugar is sometimes called lactose. It is this sugar which changes into lactic acid when milk begins to sour.

The minerals of milk are principally sodium, calcium, potassium and iron.

Condensed, or evaporated milk, is milk from which a large portion of water has been extracted by evaporation or dehydration.

Buttermilk is the product that is left after the butter has been churned from milk.

Whey is the product that remains after both fat and the casein are removed in the process of cheese manufacture.

Kumyss is the product that results when cow's milk is permitted to undergo alcoholic fermentation.

Butter is concentrated butter fats, generally containing a minimum of 82 per cent fats.

Cheese is the solid and ripened product of milk, made by coagulating the casein, generally with lactic acid, its seasoning and flavoring determining its kind.

Normal milk has a white or slightly yellowish color, not bluish as you will find in skimmed milk and poor milk.

BACTERIAL DECOMPOSITION OF MILK

The extreme measures of sanitation which are supposed to be rigidly enforced for public protection against milk pollution, are necessary because of the ease with which bacteria breed in milk. Some of these bacteria are relatively harmless, while others, such as the bacillus coli, bacillus Typhosus and the organism associated with dysentery, are injurious and health destroying.

It is impossible to secure sterile fresh milk. The bacteria will vary from 500 per cubic centimeter to as much as 20,000,000, depending on the specimen of milk.

In general, milk is classified according to its butterfat content and to the number of bacteria found in it. Certified milk should have less than 10,000 bacteria per cubic centimeter, but other milks are generally higher.

The number of bacteria present is not necessarily a sharp criterion to determine the quality of milk. However, in most cases, the less microbes, the better the milk, provided, however, that no chemical changes have been made in its composition by boiling or by the addition of preservatives.

ITS ADULTERATION

In communities where milk supervision is lax, milk is adulterated in many ways. The addition of water, the separation of the cream, the addition of thickeners, such as starch, coloring matter, and the use of preserva-

tives such as formalin (which is a 40 per cent solution of formaldehyde), boric acid and benzoate of soda, are common practices.

Milk containing any one of these preservatives is unfit for human consumption. It is illegal in most communities, but, unfortunately, there is no national law governing milk standards.

PASTEURIZED MILK IS INFERIOR TO RAW MILK

Pasteurized milk is not the proper milk to give to infants, notwithstanding all popular education to the contrary. Pasteurization consists of either heating the milk to 212 degrees for a few moments, or bringing it to about 160 degrees for twenty minutes.

From the standpoint of the dairyman and creamery, pasteurization is desirable because it permits him to use grades of milk below standard and "purify" it by pasteurization. His argument that it kills all the germs is untrue. It does not—it merely lessens their number. Frequently it is more economical for him to boil old milk and sell it, than to keep it thoroughly refrigerated.

The cost of raw milk that comes up to the standards of our local milk law, is slightly higher than pasteurized milk. But it is well worth the difference.

STERILIZED MILK IS STARVATION MILK

Milk that has been boiled or sterilized is unfit for infant use. The lactose or sugar has been changed to caramel; the albumen has been coagulated, the natural ferments have been destroyed, and altogether it is less digestible. It is a starvation food, and children fed on it, suffer from constipation, infants' colic and tend toward rickets.

All canned and dried milks are sterilized. The tremendous claims made for them in their ever-present

advertisements do not justify their substitution for a more natural milk.

Finally, we come to the fermented milks—butter-milks, kumyss, etc. These most certainly should play no part in infant nutrition. Sour milk should no more be fed than soured fruit, or any other decayed food.

Every food fed to an infant must be fresh, just as mother's milk, uncontaminated by exposure, is fresh. And most of all, alcohol fermented milk is utterly undesirable. It is only a mind filled with crassest ignorance that would feed an infant an alcoholic product.

CHAPTER VII

MILK SUBSTITUTES

In a recent article by a very prominent health writer, who has a syndicated circulation of several millions, I ran across a statement which, undoubtedly, would work a great deal more harm than could possibly be imagined.

He wrote a eulogy concerning milk powders, milk extracts, and other substitutes for fresh milk in the feeding of baby.

He also recommended the use of dextro-maltose and lactose, two artificial, synthetic sugars, used in baby's feeding formula as an inducement to greater consumption.

His claim was that dextro-maltose rendered the milk more easily assimilable, and closer approximated the milk of the human mother.

On both of these questions I take sharp issue with him. Their methods of determining nutritional qualities are determined by weight and growth measurements, instead of by health and vitality measurements.

MILK EXTRACTS ARE POOR SUBSTITUTES FOR FRESH MILK

The experiences of thousands of practitioners have attested again and again that where mother's milk fails, milk powders, extracts and concentrates are very poor substitutes for the natural milk of the animal compelled to substitute for mother's milk.

Children raised on these extracts, plus dextro-maltose or lactose, invariably suffer digestive disturbances, gas accumulation and serious constipation, forerunners of many of the so-called children's diseases.

Infant's colic is the rule rather than the exception when children are fed these extracts.

Granting that cow's milk or goat's milk is not human milk, we do not need to further adulterate its food quality by the addition of a sugar producing fermentation and gas.

In our day of modern "bug-a-phobia," when the average mother is filled with dread and horror at the presence of germs, sterilization of any product seems to have an appeal to her and she feels that if the milk is germless it is harmless.

Most milk powders, extracts and concentrates are sterilized by heat. They are cooked to such a point that the vital and all precious mineral salts, vitamins, proteins, fats and other constituents are destroyed beyond all resemblance to their natural formation.

It is true we wish a relatively germless milk—that is, a clean milk. We cannot accomplish this purpose by the sterilization process involved in the manufacture of milk powders, extracts and concentrates.

STERILIZED MILK IS STARVATION MILK

They are starvation foods, building the flabby, flaccid kind of tissue so prevalent in rickets.

Hundreds of thousands of children have abdomens too "paunchy," with intestines filled with gas. The skin of such children, pale and ænemic in color, betokens malnutrition.

When such children are placed on the scales the doctor says that they are well-nourished, merely because they weigh a definite number of pounds.

An inquiry into their habits invariably shows that most of them are thoroughly constipated, have little vitality, and are living merely because the spark of life is not thus easily exterminated.

Mothers who read this, notwithstanding the learned treatises by men with four or six degrees after their names extolling a commercial product, whose sole reason for being is the dollars extracted, know that there is no substitute for fresh milk.

The cow who feeds her calf feeds it directly from the breast, germless and without accessory agents.

If baby must be fed on an artificial diet, insist by every possible means upon a clean, wholesome, unsterilized milk.

Raw certified milk meets all these requirements, and is the ideal food for those children who must have it.

There are a number of accessory foods which should be given even with this milk.

For instance: Raw fruit juices and raw vegetable extracts should furnish the vital something which is lacking even in cow's milk.

This accessory something is most assuredly not in dextro-maltose, lactose, or any other synthetic sugar.

Milk concentrates and extracts are unfit to feed the delicate, sensitive stomach of a tiny child, when fresh milk is available.

CHAPTER VIII

FRUIT JUICES FOR THE INFANT

In the previous chapter an outline of the different kinds of cow's milk was presented. Now let us plan out baby's feeding formulas.

Sometimes, when mother nurses baby and the breasts do not secrete sufficiently, an auxiliary feeding is necessary. What are the signs indicating the necessity for outside feeding?

(1) If baby gets hungry within an hour or two after he has nursed.

(2) If there is a steady failure of growth, slow growth, or a loss of weight.

(3) If baby continuously gives forth the characteristic wails and cries of hunger.

(4) If baby shows an undue and unnatural voracity when food is given to him.

AUXILIARY FEEDINGS SHOULD NOT PREMATURELY REPLACE BREAST FEEDINGS

Even though baby comes under any one of these classifications, an attempt should be made to increase breast milk before resorting to auxiliary feedings, unless conditions are extreme.

Hot applications, breast massage, deep breathing and other exercise as well as a diet containing considerable fruits and vegetable soups often work wonders. Even though these fail to sharply increase the milk flow, do not put baby on auxiliary feeding until he shows one or more of these four conditions.

Now, what shall this auxiliary formula be? In the vast majority of cases, guaranteed raw milk, as sold by

any city dairy, diluted in the proportion of three parts milk to one part distilled or boiled water, is usually satisfactory. Add nothing else to the milk.

Always have baby drain the breasts before giving an outside feeding.

If it is necessary to give auxiliary feeding after each nursing, do not give milk only. For instance, we shall presume that baby is receiving five nursings every twenty-four hours.

At the first nursing give him the milk formula immediately following the breast. At the second feeding, let him drain the breasts. Wait approximately thirty to forty-five minutes and then use fruit juices.

The purpose of the interval between breast milk and fruit juice is to permit the stomach to empty itself before the entrance of the fruit juices. Fruit juices, especially of the stronger kinds such as orange, apple, tomato, grape, etc., curdle the milk, due to the presence of wholesome fruit acids.

The third feeding should again be milk, the fourth fruit juices and the fifth milk.

METHODS OF PREPARING FRUIT JUICES

Now, a word or two as to the preparation of the fruit juices. An infant under three months of age may be fed from the following juices:

To be diluted half and half with distilled water.

(1) Apple juice—made by squeezing the apple in a press and straining the pulp.

(2) Orange juice—squeeze and strain pulp through strainer or cheese cloth.

(3) Tomato juice—prepare same as orange.

(4) Berry juice—wash in cold running water and press through cheese cloth.

- (5) Apricot juice—prepare by removing pit, cutting in small pieces and squeezing through cheese cloth.
- (6) Peach—prepared same as apricot juice.
- (7) Plum—same as apricot juice.
- (8) Grape—same as apricot juice.

THE PULP

For most of these fresh fruit juices, pressing machines are on the market. These may be used as well, but for a tiny infant, be sure to strain the pulp from the juices.

This group consists of juices extracted from dried fruits in the following formulas.

(1) Eight prunes of the 40-60 to the pound variety, cut up and soaked twenty-four hours in one tumblerful of cold water. Be sure to keep cool and unexposed.

(2) Eight black Spanish mission figs, the same size as prunes, prepared in the same manner, with similar quantity of water, but soaked twelve hours only.

(3) Dried apricots, same formula as for figs.

(4) Dried peaches, same formula as for figs.

(5) Two heaping tablespoonfuls of seedless raisins (preferably ground) to one tumbler of water. Soak twelve hours.

The fruit juices given in both tables should have the pulp removed for infants under three months of age, but for infants over that age, more and more pulp should be permitted to remain.

At one year of age none of the pulp need be removed.

At approximately a year and a half upward, the fresh and dried fruits are always superior to the juices extracted from them.

CHAPTER IX

ARTIFICIAL FEEDING

There seem to be many conflicting views concerning milk formulas. This is not only true of the laity, but also of the profession. If one were to pick up the children's hygiene journals of half a dozen different bureaus, State, municipal, Federal, county, insurance, one would find as many conflicting opinions concerning milk formulas for the baby, when it is necessary to place him on a milk ration in lieu of mother's milk.

The following table taken from Holt shows the chemical difference between average mother's milk and average cow's milk:

	Woman's Milk Average Per Cent	Cow's Milk Average Per Cent
Fat	3.50	4.00
Sugar	7.50	4.75
Protein	1.25	3.50
Salts	.20	.75
Water	87.55	87.00
	100.00	100.00

You will note several sharp differences between the composition of these milks. A number of factors must be taken under consideration before working formulas can be arrived at. Average mother's milk contains $3\frac{1}{2}$ per cent fat. Average purchasable cow's milk contains about 4 per cent fat.

In general, milk coming from Jersey cows is richest in butterfats, that coming from Guernseys and Holsteins least. The approximate proportion would be 6 per cent for Jerseys, $5\frac{1}{2}$ per cent for Guernseys and 5 per cent for Holsteins.

Most milks commercially sold in the large cities comply with the minimum butterfat standard dictated by the municipal or county ordinances. Most of these ordinances state a minimum of 4 per cent butterfats.

The only sensible way of bringing fat and protein of cow's milk to approximately the composition of human milk is by dilution with distilled or boiled water. For most practical purposes a dilution of one-third water added to certified raw milk will prove satisfactory.

CHEMICAL CONTRAST OF COW'S MILK AND HUMAN MILK

As we contrast the chemical tables of cow's and woman's milk, a number of questions present themselves. For instance, the protein is almost three times more in cow's milk than in woman's milk. Not only is there this difference in quantity, but there is also a difference in the kind of protein.

Cow's milk protein is principally a substance called casein (that which ultimately makes cheese), while the protein of woman's milk is principally lact-albumin. It is because of this high concentration and difference in the kind of protein that indigestion occurs with artificial formulas.

The child needs lact-albumin as found in woman's milk. He gets casein as found in cow's milk. Casein coagulates. It also cakes, rendering considerable resistance to the child's digestive fluids.

If you have ever noticed, when a child vomits portions of its soured food, the curds are fairly large. Chemical analysis shows that these curds consist largely of undigested casein.

You will also observe that in the dilutions I recommend, the fat content is brought below the fat content of woman's milk. That is, I do not want to feed as

much cow's milk butterfat as I would permit of woman's milk butterfat. There is a reason for this objection.

Chemically, one of the ingredients of fat is known as a volatile fatty acid. Cow's milk fat contains nearly eight times as much of these volatile fatty acids as woman's milk. Because of this, it is practically impossible to give to infants as much cow's milk as they would receive from a nursing mother.

DILUTION OF THE MILK FORMULA IS THE BEST ANTI-VOMITING AGENT

There are three methods used by the medical profession to prevent coagulation and the consequent vomiting: Greater dilution of the milk with water; the use of gruels, principally barley water in the place of distilled or boiled water for dilution, and boiling.

If baby vomits his formula, I do not indorse the latter two methods of reducing milk coagulation. Do not boil baby's milk. For a tiny infant, gruels of barley, oatmeal and other ingredients are unessential and unnecessary. The best method is the greater dilution of the milk.

Large quantities of cow's-milk fat are badly borne when the child is suffering from digestive disturbances and fever. Under no circumstances should rich, creamy milk be given to children suffering from digestive disturbances or during periods of very warm weather. If the child's digestive system is acutely sensitive to the least change, dilution should always be greater during the warm summer months than at other times.

The table shows $7\frac{1}{2}$ per cent sugar in woman's milk and but $4\frac{3}{4}$ per cent in cow's milk. Here we introduce a fertile field for considerable argumentation. Medical practice attempts to bring the sugar content of cow's

milk equal to that of human milk by the addition of milk sugar, cane sugar, malt sugar, honey and a number of patented compounds.

SUGARS ARE INJURIOUS IN ARTIFICIAL FORMULAS

On this question we take sharp issue with medical practice. Holt, himself, gives some damaging evidence against these sugars. Concerning lactose (or milk sugar) he says: "In all intestinal disturbances, particularly where there is a tendency to looseness of bowels, lactose (milk sugar) is badly borne."

Concerning cane sugar, Holt says: "It is distinctly less laxative, but rather more likely to ferment in the stomach and cause or aggravate vomiting."

Concerning malt sugar, Holt says: "Malt-sugar preparations have the advantage of breaking down more readily, both in the stomach and in the intestines, often provoking, and, in susceptible infants, always aggravating both vomiting and diarrhœa."

Instead of any of these artificial, synthetic, relatively lifeless sugars that induce vomiting, diarrhœa, constipation and colic, the addition of fruit juices as given in previous chapters not only supplies the lack of sugars, but also preserves normal intestinal activity.

CHAPTER X

SWEETENING AGENTS IN ARTIFICIAL FORMULAS

Every time I write out a dietary for a baby I am compelled to go through a lengthy argument with the mother, elucidating my opposition to the synthetic sweetening agents.

When baby is placed on a diet of artificial food the doctor who prescribes the formula attempts to make cow's milk conform as closely as possible to the chemical analysis of human milk.

He finds, for instance, that cow's milk contains more fats and hence orders dilution of cow's milk with water.

He finds that human milk has a slightly alkaline reaction, while cow's milk has a slightly acid reaction. Hence he also prescribes lime water to alkalinize the reaction of the milk.

SUGAR SUBSTITUTES ARE INJURIOUS TO BABY

The milk sugar content is less, so, in his zeal to synthetically produce a counterpart of mother's milk, the doctor prescribes one of a number of sweetening agents. Generally maltose, dextrose, or lactose, and sometimes a mixture of two or more of these sweetening agents, are used, dextro-maltose and lactose being perhaps the most common.

Lactose is milk sugar and from its name it ought to be a good food, were it not for the fact that it is the concentrate of the sugar in milk.

In the process of extracting lactose, practically every particle of organic life is destroyed—the composition

of the sugar cells is broken up by the heating processes to which these sugars are exposed.

The sugar which is ordinarily found in milk is assimilable, available and usable by the child, but when this same sugar is synthetically extracted by a process of crystallization, then, instead of acting as a food it becomes toxic to baby.

ARTIFICIAL SWEETENERS CAUSE COLIC AND CONSTIPATION

Many mothers wonder why baby stays awake nights, moaning and crying with that low, painful intonation characteristic of babies with colic. They ask their doctor and the best information he gives them is to dose baby with some milk of magnesia or castor oil.

Dextro-maltose or lactose is included in the formula prescribed by the best of the medical profession. As I stated, their reason is not because of the best results achieved with baby, but because chemistry shows that, by using this process, cow's milk is chemically brought nearer to human milk.

I know of no better agent to induce constipation, fermentation and, above all, that distressful gas which makes baby so cross and irritable, than these synthetic sweetening agents.

SUGARS DO NOT AID BABY'S DEVELOPMENT

They produce no better growth in baby. They do not promote digestion. They do not increase assimilation. They do not foster a better energy, nor do they increase elimination.

They do, however, retard baby's bone formation, weaken the ligaments supporting the bones and tendons attached to the muscles, soften the flesh, and render

flabby the muscles—forming a fertile background for rickets and malnutrition.

There is no justification, from any reasoning, biological or physical, for the use of these sweetening agents. If baby must be given cow's milk, merely dilution with distilled or boiled water is all that is necessary.

If mothers would do this, much of their trouble would be saved and baby would grow to sturdier and healthier childhood.

CHAPTER XI

FREQUENCY OF FEEDING

We have often contended that overfeeding constitutes, without doubt, one of the most fertile causes for the presence of disease.

Mother is faced with the problem, not only of the quality of food baby is to receive, but also of the frequency of feeding.

On this subject opinions will vary considerably. You will find text-books that recommend a two-hour feeding for a new-born infant, to be continued until baby is three months of age. Other text-books will advise three-hour feedings. Some few, especially those who are more liberal in their beliefs, will recommend four-hour feedings.

What, in general, should be the policy as concerns the frequency of feedings? It would be difficult to arbitrarily declare definite rules to govern all children. Every child is an entity unto himself and should be considered accordingly. That does not prevent us, however, from giving certain generalizations from which the mother should guide herself.

SCHEDULE FOR THE NEW-BORN

My new-born baby patients are at once put on a four-hour feeding schedule. I generally write a schedule of feeding at approximately six and ten a.m., two, six and ten p.m.

Even though these hours are more or less definitely declared, mothers should use their judgment. If baby awakens at five-thirty, there is no reason to have him wait until six o'clock merely because the doctor said he should be fed at six.

Again, if he oversleeps his ten o'clock or two o'clock feeding, let him sleep. If, perchance, you are one hour or an hour and a half late for his feeding, please do not let the desire for regularity counterbalance the physiological benefits baby gets from sleep.

All in all, a new-born babe should be fed five or six times at the very most. In general practice you will find that the ten p.m. feeding is the last feeding baby should receive. It is very poor practice to feed baby at one, two or three o'clock in the morning. There is no necessity for a feeding at such a time. If his last feeding be about ten o'clock, he can very nicely go until six o'clock the next morning.

THE TEN P. M. FEEDING

Discontinue the ten o'clock feeding after baby is three months of age. At that time, four breast milk feedings per day are usually all that are necessary. This schedule may, as a rule, be kept up until baby is about ten to eleven months, provided, of course, that the mother produces a sufficient quantity of milk or that the total quantity of mother's milk, together with supplementary feedings, be sufficient to satisfy baby's needs.

FREQUENCY OF MILK FEEDINGS

By the time baby is from ten to twelve months of age, three milk feedings per day usually are all that are necessary. Then a meal may be given him between the morning and noon milk feedings and another in between noon and evening milk feedings. Both these "in-between" feedings should preferably be fruit.

Between the ages of one year and one and a half years, baby should become adapted to varied foods. After he has cut all of his incisor teeth, two milk feedings will usually suffice. Then, a mid-morning feeding of fruit, a noon meal of a mixture of raw and cooked

vegetables, together with a cereal starch will generally make an ideal program. If he is still hungry, a feeding of various kinds of fruits in the morning should be added.

As baby grows older, a starch cereal or another kind of starch in the form of a baked potato or banana or hard whole wheat crackers may be added to his evening milk formula.

General schedules such as this will be found adaptable to virtually every normal, healthy child.

FREQUENCY OF MEALS

The general principle governing frequency is based upon our knowledge of stomach and intestinal digestion. We know that it takes from one to two hours before the stomach is emptied of a meal. Therefore, that length of time should be allowed before placing another meal in his digestive system. Even when the next meal is taken, it should always be of a lighter and of a more easily digested type. Notice: The morning meal, fairly heavy; the next one coming in the mid-morning, light; the next one, heavy; the next one light, and the next heavy. That is, a light meal should follow a heavy meal.

Fruit, we know, is very much easier and quicker of digestion than milk or vegetables or cereals. The presumption is that by the time the next heavy meal is taken, the light meal that was consumed in mid-morning or mid-afternoon has been digested.

QUANTITATIVE FORMULAS

I suppose I should not close this chapter without passing a few remarks on the general subject of quantity feeding. It is true that physicians will prescribe definite quantitative formulas for babies. They will say so many ounces for such and such an age.

Tables have been produced showing the amount of feeding for a definite age, but to say that these will hold true for all children would be stretching the facts.

The intelligent observation of every mother will be necessary to properly determine exactly the quantity of feeding baby should have. Most mothers know. They can tell by baby's reactions. When he begins to dawdle, fuss and "play" with his food, it means that he is not very much in need of it. When he consumes it with a great deal of relish and gusto, it implies that he is hungry. Again, older babies will consume their food very rapidly, taking large bites and failing to chew.

Here it is a question of training. Were mothers to teach their children, both by teaching and by example, oftentimes they would find that baby was consuming too much food, largely because of bad habits of eating.

It is a well-known fact that a child will consume more than he needs, provided the food is not properly masticated or salivated. Babies who have become accustomed to slow chewing or slow drinking will generally consume a quantity closer to their actual needs than babies who have been accustomed to gulp large quantities of food.

TABLES ARE NOT SAFE GUIDES

Please do not use the standards of weights, heights and other measurements to determine whether you are feeding baby sufficiently. I can give you my assurance that when baby has not sufficient food, he will let you know in unmistakable terms, generally by crying, or, if he is older, in so many words. It would require a stupid mother not to recognize baby's genuine hunger.

Remember, undernutrition is a vastly different word from malnutrition. Most undersized, underdeveloped babies are suffering from malnutrition, not from undernutrition.

MORE FOOD IS NOT MORE STRENGTH

Again, mothers seem to believe that the more they place in baby's digestive system, the better it is for him. Mothers should bear in mind that it is only the quantity of food which is burnt or oxidized—that is used up by the body in the manufacture of new tissue. This goes to build baby's body and if mother would recognize that all surplus food is toxic and requires so much energy and development to discharge it from the body, she would not be so prone to overfeed.

All in all, it is necessary for you, as individual mothers, to work out your own quantitative formulas. The doctor may prescribe a definite amount and you may feel it your duty to get that quantity down your child's esophagus, but sometimes you may be unconsciously doing more harm than good to baby.

Govern yourself by common sense rather than by arbitrary rules, irrespective of the "authority" who sets forth the rules.

CHAPTER XII

OVERFEEDING

When all is said and done, this, after all, constitutes the most serious crime against baby's health and welfare.

That delicate, fragile human organism is literally borne down by the sheer weight of the gastric burdens placed upon it.

The trouble is not essentially baby's. Most children are born healthy. Nature is the greatest leveler of lives. The ill-born child is the exception, notwithstanding all our eugenicists and hereditary researches to the contrary.

The child is invariably better than the parent. This may not be very flattering to the parents reading this, but it is, nevertheless, true.

If Nature were to make the new-born pay the price of the crimes against our bodies, the race would be extinct in short order.

It is after birth that our crimes against the helpless innocents commence. We know more about real estate, politics, the latest scandal, and current gossip than about the most precious thing in life—human life itself.

MOST CHILDREN ARE WELL BORN

Remember that most children are well born. This is true, largely because the functions of pregnancy are automatic and very little subject to the dietetic and hygienic atrocities committed by parents. On the basis of this statement, let no parents excuse the ill health of their children on the grounds of hereditary tendency.

The biblical quotation that the sins of the parents

shall be visited upon the children even to the fourth generation, is true, in the exception, not the rule.

Were you to take into consideration the multitudinous diseases of parents and were these diseases transmittible to their children, the human race would, indeed, be a sorry spectacle.

Nature, in its sublimer wisdom, gives most children a fair chance in life. They suffer from our mistakes, not Nature's.

In a previous chapter I mentioned some of the major conditions in which feeding should be decreased. As I read over these statements, the psychological obstacles of some experiences with mothers came to me.

OVERFEEDING—A MATERNAL INSTINCT

The big difficulty is with parents, not with children. Deep rooted in the psychology of almost every mother is a strong pervading instinct that finds joy in feeding all she possibly can to her children.

I have seen mothers undergo actual torture and suffering because baby missed a meal. I have seen them shaken with fear of little Snookums starving because he refuses food for a meal or two.

Somehow or other food and strength seem to be confusedly identical. That is, the more food mother can force into the little one, the greater becomes his strength and growth. Such is her belief.

It is a pleasurable exception to meet a mother with the strength of mind and courage of understanding to do no forced feeding.

SWEETENERS CAUSE GLUTTONY

From the time when they are tiny tots to the time of reason and understanding, most mothers use every subterfuge to get more food into their children.

They find that baby consumes more milk when it is

sweetened than when it is unsweetened. Hence they succumb to the lure of sweetening agents. Later, they discover that baby prefers his vegetables well cooked rather than raw or slightly steamed. When asked the cause for no raw vegetables for baby, mother places the blame on him and lets it go at that. She never thinks of questioning her training of baby's habits.

Baby consumes less food if served plain, unsweetened, uncondimented and uncooked. Natural appetite asserts itself more than artificially stimulated appetite by creating craving for only that quantity of food that the body needs. It is far better to give baby the minimum quantity of food proportionate to his needs than the maximum quantity.

But, oh! you mothers, who want to give, and give, and give, to your kiddies—when will you learn to understand this?

CHAPTER XIII

COLIC AND NURSING

One of the principal woes of infancy is colic.

The torture and distress of a colicky child have been not only the destruction of baby's health, but ruinous to mother's nerves.

To see baby suffering from gas oppression, night after night, wakeful, alert, moaning, crying and displaying the only manifestations he is capable of displaying is indeed a pitiful sight.

BREAST MILK IS NOT NECESSARILY A PREVENTATIVE AGAINST COLIC

There seems to be, with a number of mothers, an idea that the mere feeding of breast milk should be sufficient to prevent colic or gas.

Even though we have unequivocally come out again and again advocating mother's milk as being greatly superior to artificial feeding, yet that does not mean that mother's milk is not often injurious to baby. There are many conditions of mother's breasts and of mother's general health which will develop colic in her babe.

For instance, if there is a marked tendency for the breasts to clog, which so frequently occurs in the early period of nursing, especially where the mother lies quiescent, without exercise, in bed, the milk coming from the breast will be gas-forming and sometimes constipating.

Under the circumstances the mother may be gas-laden. Since her milk is, in reality, a living physiological picture of herself, gas colic is transmitted to her suckling babe.

The question logically arises: "What is to be done?"

THE MOTHER'S "LYING-IN" DIET DETERMINES WHETHER HER CHILD HAS COLIC

Of course, we must get at the cause. If the mother is still in the lying-in period, where she is compelled to rest and recuperate from a strenuous labor and confinement, it is more or less inevitable that some stagnation of milk flow occurs.

Care must be used in the feeding of the lying-in mother. Typical, regular hospital food is the poorest possible diet for the mother, under the circumstances.

To be fed meat, chicken, tapioca, egg-nogs, mashed potatoes, gravies, tea and coffee under such circumstances is atrocious in the extreme.

Inevitably, constipation is present during the lying-in period. The "easy way" of relieving it is by the useless, idiotic method of the average medical practitioner in administering castor oil, milk of magnesia or any other cathartic.

Remember, the mother does no more than breathe. Her muscles do not work. She is unfit to receive large portions of concentrated food.

"CAKED" BREASTS DO NOT ALWAYS INDICATE CESSATION OF NURSING

When the breasts are already caked, instead of giving up nursing, which is the "easy way" prescribed by the average doctor, much can be done by massage with oils, or by the use of hot applications to soften the congealed mass of coagulated breast milk.

Case after case, where mothers were advised to discontinue nursing, could have been saved if the mother had only gone on the fruit diet for a few days, massaged the breasts, kept her nerves quiet, and applied water applications to soften the tissues.

Mother's breast milk is the cause of baby's colic in suckling infants, and the cause should be corrected.

When the baby is in the midst of a spell of colic, it is

a great mistake to adhere to a three or even four-hour schedule.

A "MISSED" MEAL IS AN EXCELLENT REMEDY
FOR COLIC

"What should be done to baby?"

Very little harm will come to him if he misses a feeding or two. It would be a great deal better for him, if he should get three feedings a day, say six hours apart, than to feed him every three hours during the acute colic attack.

Mothers should note that when baby is in distress and discomfort, it is just as relieving to him to miss a meal as it is to you when you have gas pains and are in distress.

Give that poor, overworked, overburdened digestive system a rest. Nature, in its divine wisdom, will do its part.

During the acute colicky period, cool, boiled or distilled water should be given the baby in as large quantities as he will accept.

Remember, water is a splendid solvent of gas.

A few other measures will also be of assistance for colicky babies. Warm applications over the abdomen will relax the taut, tense muscles, and will assist the discharge of gas.

A little gentle kneading of the abdomen, over the intestines, will force the gases outward.

Train baby to sleep on the abdomen instead of on his back, and he will become free of much of the distress.

These are a few simple methods by which to handle baby's colic.

Remember, however, that these are but incidental. Get at the cause, and in nine cases out of ten the cause will lie in mother's nervous condition, or in the matter of her diet.

CHAPTER XIV

MOTHER'S ILLNESS DURING NURSING

Were one to go into case histories carefully, and intelligently ascertain the causes why mothers stop nursing their babies, one would find that a leading cause is the temporary indisposition of the mother.

"I caught the flu and therefore had to wean my baby."

"I was laid up with an attack of rheumatism and, of course, could not go on nursing baby."

"I was in bed for a week with acute indigestion so I had to put baby on the bottle."

These and similar reasons are generally given as causes for weaning baby and for placing the cow as foster mother in charge.

Most of these mothers weaned baby at the advice of their doctors. "You cannot feed a well baby sick milk," is the excuse given by the physician.

TEMPORARY ILLNESS DOES NOT JUSTIFY WEANING

This we shall not dispute, for it is true that we cannot feed a well baby from the breasts of a sick mother. To say, however, that because a mother is temporarily indisposed there is sufficient justification for permanently taking baby from the breast, is, indeed, stretching the facts.

Countless babies who have gone to The Great Beyond might have survived a temporary change of diet, whereas they could not withstand a permanent change.

It is a mistake for a nursing mother to permit the breasts to go dry during a temporary indisposition, even though she be compelled to feed baby artificially for the time being.

In most cases it is not the illness which coagulates the gland. It is the failure to empty the breasts and the consequent drying-up of the secretion. In the ordinary type of temporary indisposition, a mother who considers it her sacred obligation to nurse her baby should keep her breasts pumped dry periodically as if the baby were nursing. A breast pump may be procured from any drug store.

Every four hours all the milk that can be pumped out should be discharged and the gland emptied as completely as possible. Occasional warm applications and very gentle massage would be of considerable assistance.

THE BREASTS SHOULD BE DRAINED DURING ILLNESS

Among the European peasantry, should a mother's milk become temporarily unfit because of illness, it is the custom to have a young puppy drain the breasts periodically. This is not necessary in the American home. The breast pump will serve adequately.

But to say that merely because a temporary ailment afflicts mother, there is sufficient justification for weaning baby, irrespective of his age, is indeed a grievous mistake.

Mothers should try, by every conceivable resource, to keep the precious milk supply intact. They should think, not twice, but many times before weaning baby.

CHAPTER XV

WEANING

Most of the diet errors of infants commence from the time of weaning. At this period our inherent intelligence is supposed to function in place of the automatic processes of Nature.

It does not require knowledge or intelligence to nurse a child. The manufacture of milk is a process that, to a considerable extent, functions independently of our mental status.

However, when we are confronted with the problem of altering baby's diet schedule, so that he will be furnished with all those ingredients necessary to health and growth from food which we must procure for him and external to the nursing mother, then we are facing an entirely different question.

The child changes from a monodiet, consisting exclusively of one item (mother's milk), to a heterogeneous diet, having as many ramifications as foods that are known.

Weaning schedules will vary according to the intelligence of the mother, the doctor, the racial habits, the climatic conditions and the customs prevalent at the time.

Consequently it is a difficult task to more or less arbitrarily designate a routine series of feedings which will adequately substitute for the natural breast milk upon which baby has been fed before. Therefore the best one can do is to generalize and furnish illustrations which will serve for the majority of children.

THE TIME FOR WEANING

First of all, the current belief of "nine months' wean-

ing" is inherently and basically incorrect. It is hard to understand why such a bit of nonsense should have crept into the popular psychology of motherhood—merely because it happens to be a figure similar to the duration of pregnancy.

There is no set time limit for the commencement of the weaning process. However, there are indeed very few children who are sufficiently advanced in growth and in health to warrant their being weaned at so early a period. Notwithstanding this, it is a sad commentary on our present state of civilization that the great majority of children are weaned long before their ninth month.

This, of course, is due largely to the fact that the modern civilized mother is becoming less and less able to perform the normal functions of procreation and the natural care of her baby.

There are a number of clear-cut indications showing the necessity for weaning baby, irrespective of his age or development.

If mother's milk completely fails, weaning is necessary. If it merely diminishes weaning is most assuredly not necessary. Every particle of healthy mother's milk is vital for baby. Mere diminution of quantity is no justification for weaning.

Chronic debilitating disease such as Bright's Disease or tuberculosis on the part of the mother makes weaning necessary.

Baby's negative reaction in the form of illness or distress symptoms, if directly attributable to nursing might indicate the need for artificial feeding.

Barring the abnormal, however, Nature's indication for weaning is evidenced when baby has developed sufficiently to take care of solid food; that is—when his incisor teeth are breaking or have broken through.

THE TRANSITION PERIOD FROM SUCKLING TO CHEWING

Now we may elucidate several principles governing this transition period in baby's diet. Remember, it is not good policy to instantly attempt baby's conversion from suckling to chewing.

From the time the first supplementary feeding is introduced, to a period when baby has his entire complement of teeth, a number of changes in his diet must be made.

The change from liquid food to solid food must come gradually. To illustrate the working of these principles we shall take a hypothetical baby and work out his feeding formulas from the time of full nursing to complete weaning.

We shall presume that this child is between ten months and one year of age, the period when most children are weaned or have been weaned.

CHANGING THE FEEDING SCHEDULES

At this age virtually every baby is being fed at four-hour intervals—6 a.m., 10 a.m., 2 p.m., and 6 p.m. As a rule he is also securing supplementary food in the form of cereals, milk and fruit juices. Most babies get their supplementary milk formula after nursing and the cereal for the 10 a.m. feeding.

Now how shall we proceed to change baby's schedule so as to wean him with the minimum amount of discomfort and ill effects to both him and mother?

Weaning should be done gradually. Both mother and child should be permitted to adapt themselves to the changed regime. Where abnormality does not exist, I prefer to take at least three months to complete the weaning process.

Now let us follow the program with the normal child. The first nursing to dispense with would be that at 10

a.m. At this age I see no necessity for the use of the bottle. A feeding formula of seven ounces of raw certified milk and three and one-half ounces of distilled or boiled water would make up this feeding.

Note that I do not include sugar, lactose, corn syrup, or any other sweetening agent. The sugars in a natural diet should come from fruits and from fruit juices. These should be served to baby also via the spoon and not through the bottle—about one hour before his 10 a.m. cow's or goat's milk feeding as by the above formula.

The fruit juices are divided into two groups; those which are squeezed by pressure from the fresh fruit such as oranges, grapes, tomatoes, etc., and those which are extracted by soaking from twelve to twenty-four hours, such as fig juice, prune juice, apricot juice, raisin juice—in fact, any kind of fruit juice.

The fruit juices extracted by squeezing the fresh fruit should be diluted half and half with distilled or boiled water while those made by soaking the fruit need no further dilution.

By the time baby gets his milk formula at 10 a.m., the fruit juice has left the stomach.

THE CHANGING SCHEDULE

Thus far baby's weaning process has progressed as follows:

Six a.m.—Breast feeding.

Nine a.m.—Fruit juice (eight ounces total formula).

Ten a.m.—Cow or goat milk formula (seven ounces milk, three and one-half ounces water).

Two p.m.—Breast feeding.

Six p.m.—Breast feeding.

Continue this formula for one month provided, of course, that everything proceeds normally. You must

understand that every formula is flexible and variable, depending on the individual child.

The next breast nursing to be discontinued is the 2 p.m. feeding. For this I usually substitute about four ounces of whole-grain cereal prepared in the usual fashion.

Please note that I say whole grain, not the regulation super-refined commercial cereal that is so universally fed and yet so utterly unfit for human consumption. This cereal may be of whole wheat, corn, oats, unpolished barley or brown rice, ground to suit. Feed baby with a spoon. Follow the cereal with a milk feeding of about four ounces of milk and two ounces of distilled or boiled water.

Now baby's feedings are as follows:

Six a.m.—Breast feeding.

Nine a.m.—Fruit juice.

Ten a.m.—Milk per above formula.

Two p.m.—Four ounces of cereal, six ounces of the milk formula.

Six p.m.—Breast feeding.

This may be continued for a month. Note that I have purposely left the morning and evening feedings for the last.

THE MORNING AND EVENING BREAST FEEDINGS ARE DISCONTINUED LAST

Most mothers know that the breasts are quite full in the morning and that they contain considerably less milk during the day.

If the breasts are permitted to rest from morning to evening the chances are that they will be full by six p.m. That gives baby the benefit of another month's nursing.

There is still another reason behind the retention of these two feedings beyond the time of the others. Most

babies usually go to sleep with the evening nursing. From a disciplinary attitude the discontinuance of the evening nursing is the most difficult part of the weaning process.

After a month, the six a.m. feeding may be discontinued. In its place give baby about four ounces of any fruit juice formula which I have quoted, and an hour later let him have the customary quantity of milk.

Now at the end of two months baby's feeding formulas are as follows:

Six a.m.—Four ounces of any fruit juices.

Seven a.m.—Seven ounces of raw certified milk, three and one-half ounces of distilled or boiled water.

Nine a.m.—Fruit juice, four ounces.

Ten a.m.—Seven ounces of raw certified milk, three and one-half ounces of distilled or boiled water.

Two p.m.—Four ounces of cereal as quoted above, six ounces of milk formula.

Six p.m.—Breast feeding.

This program is to be followed for one month. Then the final six p.m. breast feeding is to be taken away and a standard milk formula of seven ounces of certified raw milk and three and one-half ounces of boiled or distilled water is to be given in its stead. Use a spoon—not the bottle.

THE COMPLETE WEANING SCHEDULE

Now we have a fully complete weaning schedule which has taken three months to develop.

Six a.m.—Four ounces of any fruit juice.

Seven a.m.—Seven ounces of raw certified milk and three and one-half ounces of boiled or distilled water.

Nine a.m.—Four ounces of fruit juice.

Ten a.m.—Seven ounces of raw certified milk, three and one-half ounces of distilled or boiled water.

Two p.m.—Four ounces of cereal as quoted above, four ounces of raw certified milk, two ounces of distilled or boiled water.

Six p.m.—Seven ounces of raw certified milk, three and one-half ounces of boiled or distilled water.

Thus far we have carried baby through his weaning program, but by no means have we adopted a permanent schedule. We have merely taken the first step in baby's dietetic adjustment.

We cannot keep baby on this program very long. As his development proceeds, his needs change.

We must continue the unfoldment of baby's diet until we are in a position to establish him on a more or less permanent basis.

CHAPTER XVI

DIET AFTER WEANING

THREE MONTHS TO MAKE THE CHANGE

In the preceding chapter I explained to you the procedure of slowly altering the baby's diet so that he becomes gradually acclimated to the changed regime. It has taken us three months to adapt baby from breast feeding to some of the foods that he must become accustomed to for the remainder of his life.

You will observe that, thus far, baby is still on a liquid or a near-liquid diet. We have allowed him the following items: Milk, fruit juices and cooked cereals. By the time he is a year old, it becomes necessary to gradually accustom him to semi-solid food and later to solid food.

Even though the schedule will vary with each individual child, yet there are a few general rules which should be obeyed in order to accomplish this change with the minimum ill effects and the maximum benefits.

FRUIT IS THE FIRST FEEDING IN THE MORNING

Let us analyze each individual feeding and then see wherein we can make some constructive changes as baby grows older. The first liquid feeding we have placed him on after weaning has been completed is the fruit juice feeding. Fruit, with but a few exceptions, is, in reality, a semi-solid food. Strictly speaking, it cannot be classed as a solid food.

Most of the watery fruits which include oranges, grapefruit, grapes, peaches, melons of all kinds, apples, pears, plums and others somewhat similar, may be easily used to serve in place of the fruit juices in the

morning; that is to say, the fruits themselves are usually superior to their juice extracts. It is my policy to quickly adapt baby to the use of natural fruits rather than processing them in any manner by heat or preservation.

FRUITS SHOULD SUBSTITUTE FOR FRUIT JUICES

Consequently, as soon as baby shows an inclination toward chewing, that is, after his incisor teeth have emerged, I would substitute watery fruits especially, for the fruit juices.

These may be served in various fashions. Fruits such as apples, pears, peaches and plums may be given to him mashed with a spoon. If one is compelled to rely upon dried fruits, due to the season of the year, these may be soaked in the usual fashion. Soaking them renders them quite soft, after which they may be easily macerated with a spoon and served to baby in place of the juicy extracts.

In this class come such fruits as figs, prunes, raisins, dates, apricots, dried apples—in fact, any kind of dried fruit.

Do not understand me to say that fruit juices should not be served to baby at any time. All I mean is that the fresh or dried fruits are superior to the juices and when baby learns to chew, they should be given to him in preference. Occasionally, for variety's sake, fruit juices may be used.

MILK USED EXCLUSIVELY IS INSUFFICIENT FOR NEEDS OF GROWTH

As baby grows older milk will usually be found insufficient to satisfy growing needs. Then, auxiliary foods should be given him, preferably in the form of some starch. In this group I include all the whole-grained

cereals with special preference to whole-wheat and brown rice. Bananas are also a very acceptable starch food.

A CHILD'S CEREAL BREAKFAST

An ideal breakfast for a baby, say from a year upward, would be something like this: A whole-grain cereal prepared in the usual fashion, although not quite so thoroughly cooked as most adults prepare it for themselves.

If baby has been adapted to sweetening agents, permit him to have a very small quantity, say, a level teaspoonful of honey or the equivalent in maple syrup. Be sure, of course, that the maple syrup is genuine and not glucose or cane sugar extract.

There are far too many syrup adulterants on the market and it is the exception to find the genuine maple syrup.

MILK MAY FOLLOW CEREAL

After the cereal, permit him to have a glass of milk. Observe, if you please, "after the cereal." Most adults prefer to use their milk or cream mixed with the cereal. I am opposed to this practice, largely because it makes the cereal "too mushy" and tends to make chewing very careless. Also, there is little possibility of his overeating if the milk follows the cereal and is not mixed with it.

FRUIT FLAVORING FOR THE CEREAL

Often baby likes to have his cereal sweetened with other substances than syrups or honey. If mother knows how to prepare jams in a wholesome fashion, free from sugar, a product of this kind may be mixed with baby's cereal.

To be safe, otherwise, use California dates, black mission figs, seedless raisins, or chopped up dried prunes as a flavoring agent with baby's cereal.

You will find that baby will like the flavor of the dried fruit with his cereal. Besides, it makes quite a compatible mixture.

SPoon FEEDING

Both the cereal and the milk should be spoon-fed. The mother who "is in a hurry" to feed baby usually inculcates in him the great American habit of gulping long before he would have acquired it in contact with his elders.

No matter how hungry he may be, make the portions on the spoon small and, by precept and example, as well as by verbal methods, teach baby to chew.

SUBSTITUTES FOR CEREALS

If, perchance, there does not happen to be any cereal in the house, then hard, whole wheat crackers or some real hard, stale, whole wheat bread will do quite as satisfactorily as a cereal. Soften it just a trifle by soaking it in some warm milk. Add the same sweetening agents to which baby has been adapted. If he has not yet been accustomed to sweeteners there is no reason to start.

Try to have his diet as unflavored and unseasoned as possible. A normal, healthy child in the full vigor of his playing days gets a much better flavor from his food than the adult who thoroughly sweetens, flavors and seasons his food.

CHOICE OF BREAKFAST FOODS

It is very evident, thus far, that for breakfast we have quite a choice of foods. There are seven or eight good wholesome cereals, milk, flavoring agents, and eight or ten dried fruits, together with substitute starches such as bananas, whole wheat bread, hard whole wheat crackers and other products of the same type.

Between the ages of one and one-half to ten or twelve, children play hard and vigorously. They burn up considerable energy and often seek to have their stomachs filled.

The recess mid-morning lunch, for practical purposes, has been found necessary for active children. If a child is listless, dull and seemingly dispirited, there is no reason why he should get a ten o'clock lunch. I advocate this only for the generally healthy, vigorous, active child.

THE TEN O'CLOCK RECESS LUNCH

The ten o'clock recess lunch should be exclusively of fruits. Many schools, public and private, try to make this meal "nourishing" and feed graham crackers and milk. Some schools have changed the regime to fruits instead of crackers and milk with more than satisfactory results.

I have thus far revised baby's meals after the weaning stage up to his recess lunch. In another chapter I shall discuss his noon lunch and the other feedings throughout the day so that we may work out a general ideal schedule, productive of the maximum of health and vigor.

CHAPTER XVII

THE NOON AND EVENING MEALS

We have carried the baby through the nursing period and through the weaning process. We have adapted him to a changed early-morning and mid-morning dietary.

At this stage we presume he is at least fifteen months of age or older. Thus far he has been gradually adapted to a mixed diet of fruits, whole-grained cereals, milk in the morning, and fruit in the mid-morning. We shall now work out his regime for the noon and evening meals.

We shall presume that the child we are prescribing for has a full complement of incisor or front cutting teeth, and that his eye teeth (sometimes known as stomach teeth and technically known as canine teeth) have formed. That is, baby's chewing structures are fairly well developed.

SUCKLING IS WRONG AFTER THE TEETH ARE FORMED

Of course, by this time we know that he has been weaned from bottle feeding. If his teeth have formed, the suckling habit is hygienically wrong. Baby may now eat with a spoon or with a blunt baby fork.

His chewing habits will be what his parents have taught. If he is a "gulper," it is up to the mother, by teaching and by precept and example, to train him to chew.

What shall we prepare for baby's noon lunch? It is now high time that he became adapted to the use of the various vegetables. A diet of raw, cooked, and baked vegetables, balanced by a starch, is very readily applied.

AT LEAST ONE-THIRD OF HIS MEAL SHOULD BE RAW

Here are a few sample meals :

Make a salad of various kinds of greens such as lettuce, celery, spinach, cabbage, watercress, young beet tops, or other greens available. Chop up very fine in a chopping bowl. Add some delightful dressing.

Study dressing formulas, for it is in the dressing, rather than in the taste of the vegetables, that the success or failure of baby's preference to the salad is determined.

Honey makes a very valuable addition to the dressing formula. Corn oil, lemon juice, mayonnaise, tomato sauce and various other dressing formulas are easily applicable. Do not use salt or vinegar.

At least one-third of the total content of the noon-day meal should consist of this raw, green salad. Balance this with a starch vegetable.

ONE-THIRD SHOULD BE A STARCH

If you have a baked potato, yam, sweet potato, baked pumpkin or egg plant, it will serve satisfactorily.

Let baby learn to eat his baked potato without butter or salt. He should eat the skin, as well as the starch of the potato. Under no circumstances should any other form of potato be given baby.

French fried, American fried, shoe-string, hashed brown, mashed, and a multitude of other forms of preparing potatoes are undesirable for baby's tiny digestive system.

GRAIN STARCHES MAY SUBSTITUTE FOR VEGETABLE STARCHES

If one of the vegetable starches I have mentioned is not on hand, a grain starch will do as well—bread or crackers made of whole wheat, corn, rye, oats or barley. Flavor his bread or crackers with a fat.

THE FATS

Most mothers seem to think that cow butter is the only kind of fat available. Cow butter contains from 75 to 85 per cent butter fat. There are other butters on the market which, even though they do not contain as much butter fats, are often more desirable and wholesome.

Almond butter, even though it is twice or three times the cost, contains one-half the quantity of butter fats and for children of delicate constitutions, it is often much more assimilable than cow butter. Peanut butter is not necessarily a true nut butter, but sometimes serves as a satisfactory substitute.

The butter from almost any of the nuts is quite readily assimilated by baby's digestive system.

No more than one-third of the total meal content should be of starches, either grain or vegetable.

ONE-THIRD SHOULD BE COOKED OR STEAMED
VEGETABLES

It is desirable for practical purposes that one-third of baby's meal consist of steamed or baked vegetables, such as peas, beans, cauliflower, carrots, string beans, cabbage and others.

This constitutes a fairly well balanced meal of a type thoroughly suitable to most children.

There are more than a hundred different varieties of vegetables suitable for this feeding. There is no reason, whatsoever, why this diet should become monotonous or tiresome. If it does, it is merely an indication that the mother has not used sufficient ingenuity nor has she acquainted herself with the possibilities of natural diet.

CHAPTER XVIII

FROM A SUCKLER TO A BITER

There is a definite evolution in the digestive functions of baby. At birth he is a suckler. Nature has not blessed him with teeth. In her economy and wisdom she has found teeth unnecessary for the suckling. Mother's breasts might otherwise be hurt.

Baby's digestive tube is also adapted to the liquid nutrition of milk. An analysis of the digestive juices in baby's stomach reveals that there is a relative absence of hydrochloric acid and pepsin.

Rennin, the ferment substance digesting milk, is predominant. At six months or thereabouts a change is evidenced in baby's mouth structures and in his digestive tube. Teeth appear.

In the stomach rennin becomes proportionately less while the other juices, hydrochloric acid, mucous and pepsin, become proportionately more.

What is happening?

Nature is preparing the suckling babe for more mature functions. Mother must understand this transition.

Baby now puts things in his mouth with a definite purpose. He seeks to bite and chew.

Mother must also make some slight changes in baby's dietary.

Until this time baby's food was pure liquid. His auxiliary or supplemental feedings were also liquid. If orange juice were fed him, it had to be strained. The pulp of raisins, figs, prunes had to be omitted. But now a change has to be made—slowly, gradually, by evolution.

Between the sixth and ninth month, in most babies, it is desirable to make the juices a trifle coarser. The pulp should not be strained from the orange juice. The coarser parts of the figs and prunes should be left in.

TEETHING MARKS THE CHANGE

Many babies commence teething from six to nine months of age. The pressure of a tasty substance against sensitized gums is quite pleasurable.

The wise mother will not use rubber, and, emphatically, not the colored rubbers. The celluloid, ivory or bone rings are also unsatisfactory. Their taste is not very appetizing.

The wise mother will substitute a stalk of celery or rhubarb with the outer covering removed. Celery is the best, for baby cannot bite pieces off, but gets the good taste of the celery juice.

Before the sharp-pointed teeth have formed, the raw carrot, the turnip and the parsnip may also be used, but as baby develops teeth he is more likely to bite pieces off.

An introduction to baby's future diet is now also advisable. A slow transition must be made from bottle feeding to spoon feeding.

Now, also, the groundwork for baby's future habits must be laid. Mother may scrape apples, pears, peaches, plums, etc., and feed them to baby.

All foods should be mashed or pulped. Grits, chunks or pieces must not be fed. Remember, he is using only his gums for chewing, and these are highly sensitive.

FORMATION OF EATING HABITS

At nine months of age most normal babies are intelligent enough to learn by instruction, or, better yet, by precept and example. The painstaking mother may

train her child to thorough chewing, to taking of small bites, and to good mastication.

The mother who takes large spoonfuls in feeding baby is laying a poor foundation in baby's training. The mother who is hurried in feeding baby is equally culpable.

The gulper and overeater is formed early in infancy. Baby's meal should be a function, not a maneuver against time.

No more than a third or a fourth of a level teaspoonful should be fed baby at one time. Wait until he has, at least, gone through the motions of chewing.

Do not feed him the next spoonful until he has completely swallowed the previous one.

Sometimes mother must teach baby by precept and example. With a separate spoon she should also take small quantities of food, admonishing baby to chew. She should show him the chewing process.

Baby catches on to mother's teaching very quickly, in fact, more quickly to mother's teaching than to that of anyone else.

Remember, mothers, baby is on the same wavelength, the same vibratory rate as you are. It is very easy for your bad habits to become his.

It is worth much study and the taking of infinite pains to train baby to obey the laws of moderation. It will, in the future years of his life, save him many of the physical ailments following the disobedience of Nature's laws.

CHAPTER XIX

SPOON FEEDING

Some time in baby's career mother must decide when to stop the bottle and when to start spoon feeding. Suckling cannot go on indefinitely; a change must be made.

Bit by bit a transition must take place from the purely liquid form of food to the semi-solid and, ultimately, to the solid. How shall this change take place and when?

When an infant is born he has no teeth. Nature has not prepared him for the chewing or biting processes, but has intended his mouth for suckling purposes only.

But as teeth form, a transformation occurs with the muscular and bone development of baby's mouth. The gums become firmer and more resistant, the muscles stronger, the jaws more powerful—baby is changing from a suckler to a biter.

Mother must be prepared for this transition. To keep a baby suckling for two or three years, as is often the practice, is indeed a great mistake. To say that baby will not go to sleep unless he has his bottle is generally a sign of weakness on the part of the mother.

WHEN TO DISCONTINUE BOTTLE FEEDINGS

After baby's incisor or front teeth have formed and the canines or premolars are well on their way, it is high time that baby be spoon-fed rather than bottle-fed. That does not mean that there should be a sharp revolution in his diet, but the manner of feeding should be changed.

Dentists agree that suckling over any extended peri-

od of time frequently malforms the jaws and distorts the even arrangement of teeth. Often the bracing and realignment of teeth could have been prevented had mother stopped bottle feeding and substituted spoon feeding sooner.

THE EMPTY BOTTLE IS A PACIFIER

I have seen babies suckle the bottle for hours and hours, long after the liquid had been drained, keeping their jaws in distorted, malformed positions. In these cases the empty nursing bottle acts as a pacifier.

It is a sign of a spoiled child when baby needs a pacifier. The modern mother does not use it but succeeds in training her baby otherwise.

You who do not believe that these tiny little mites of humanity can be spoiled, are very much mistaken. There should be no compromise on the question of pacifiers. In most cases it is the child who should have been weaned from the bottle long ago for whom the pacifier is necessary.

Sometimes it is mother's fault entirely. It is so much easier to fill a bottle, thrust it into baby's mouth, and have him lie down and go to sleep. The trouble is over in a jiffy, whereas spoon-feeding is a bit more laborious and a painstaking process.

In this day of labor-saving mania, even care of baby must be short circuited. But if a baby is worth while producing, he is worth while training properly.

There is no advantage that I can see in keeping baby on the bottle after his teeth have been formed and developed.

SPOON-FEEDING PREVENTS OVEREATING

There is one more advantage that spoon-feeding has over bottle-feeding. Notice the way baby suckles when he is more than six months old. He will invariably

drain his bottle of from seven to ten ounces in five or six minutes—the gulper and overeater is in formation.

It is almost impossible to feed baby this same seven to ten ounces of food within five or six minutes if he is spoon-fed. When the food is taken very slowly, it digests better and assimilates more readily.

Unless baby is nursing at the breast, as soon as his front teeth have fully formed, slowly change the feeding from bottle to spoon.

Do not do this in a day. Make all changes gradually. At first feed with the spoon for one feeding only. Wait several weeks and then do it for two feedings. By this slow, gradual, nonrevolutionary method, change baby from bottle-feeding to spoon-feeding.

CHAPTER XX

HOW TO EAT FRUIT

On glancing at the title you probably wonder what may be said concerning the manner in which people eat fruit.

Eating is eating, you think to yourself, and certainly there is no art in that. Yet I say that not more than one in ten knows how to get the most out of the wonderful fruit produced in California.

I shall give you some illustrations.

Observe the average man eating a peach.

He carefully peels and then eats it.

Peaches, plums, figs, and all other fruits with edible skins should be eaten with the skin. It is sufficient to merely wash the fruit in running cold water in order to remove the dirt.

ALL EDIBLE SKINS SHOULD BE EATEN

When the skin is inedible, Nature tells us in unmistakable terms. The bitter skin of the orange, and the distasteful skin of the banana are some illustrations.

I have seen mothers go to great pains to remove the skin from grapes. The argument was that the skin went through the digestive system and came out unchanged.

They did not realize that the grape skins and other edible skins constituted the necessary roughage for normal peristaltic action.

I have also seen mothers remove seeds from grapes. If there be no constipation, I assure you these tiny seeds do no harm.

If you believe that grape seeds or other seeds cause appendicitis, you are holding views twenty-five years

behind your time, and views which have been proven untrue again and again.

Many people do not know how to eat oranges to obtain full value from them. Orange juice is but a partial value. The pulp and fibrous portion of the orange is the part which stimulates bowel action. The proper way to prepare an orange is to remove the skin and eat the inner portion by the slice.

The full nutritional value can be had only by eating the fruit "as is," providing it be clean and the skin edible.

CHAPTER XXI

BUILDING THE TEETH

When dentists tell us that 90 per cent of our children have defective teeth by the time they arrive at the age of 13, really before life has truly commenced, we are indeed facing a great climax in our problems of national nutrition.

It is recognized now, more than ever before, that the quality and formation of the teeth are directly dependent upon the type and kind of food which goes into the body.

Teeth are formed in the early embryonic period, long before birth. From the mother's blood stream are taken the all-precious salts which go to build the nucleus of baby's teeth.

It is for this reason that so many mothers are compelled to undergo dental care immediately following the birth of their children. Their blood has been devitalized because they did not consume the calcium salts contained in food as fast as the developing child took it to build teeth for himself.

Even though a child be born without teeth, nevertheless, the calcium-formed roots are there, underneath the gums, before birth.

TEETH ARE BUILT BY THE MINERAL SALTS OF FOOD

It takes minerals to build body structures made of salts, and since in the final analysis, tissues are made of food, food must contain all the elements for building these body tissues. Biologically reasoned, if food equals the body, then if there be a deficiency in the body, there has been a deficiency in the food.

Modern hygienists are beginning to realize that the problem of teeth decay is more a matter of nutrition than of external cleanliness. Of course we advocate the use of a tooth-brush and water to keep the external surfaces as clean as possible, but the unalterable fact remains that teeth decay does not commence from the outside.

You may keep the external surface of the teeth in almost any shape, yet decay will not take place until we have the susceptible condition of the blood, namely, mineral starvation.

That this mineral starvation is true, any dental hygienist will attest. Notwithstanding that we are the best fed nation on the face of the earth, yet truly we are starving in the midst of plenty. Practically every case of teeth decay is due more to mineral starvation because of insufficient consumption of fruits, vegetables, whole grains, milk and nuts, than to external lack of cleanliness.

When America wakes up and learns how to feed its children with the unadulterated fruits, vegetables and the whole grains rather than with the refined sweets, white flour extractives, pastries, cakes, soft drinks, mushes—then, and not until then, will the teeth of our children be adequate to perform their normal function.

CHAPTER XXII

IS SUGAR A FOOD?

The statement has often been made that sugar is a starvation food. Its physiological effect upon the body has been demonstrated again and again. In this chapter I propose to show how, in the technical manufacture of sugar, it becomes devitalized, demineralized, and robbed of any life-giving qualities it once possessed.

Commercial sugar, as you are aware, is made from cane sugar and from sugar beets. At the present time beet sugar is very much more extensively used than is cane sugar. Hence the manufacture of beet sugar will be discussed.

When the beets are received at the sugar factory the tops and a small part of the neck of the beet are removed. The purpose is to free the beet from the mineral matter it contains, as it interferes with sugar crystallization. Therefore, the first robbery of the precious salts is accomplished before the beet undergoes any chemical change.

The beets are then washed. The juice is extracted by what is known as the diffusion method. This consists of cutting the beets into very thin slices and running a stream of warm water through them.

The sugar is dissolved and passes through with the water. When this juice emerges from the beet it is as black as ink. Now comes the first of the devitalizing processes.

POISONOUS CHEMICALS ARE USED IN ITS MANUFACTURE

Lime or carbon dioxide is added to it to precipitate some of the impurities found in this inky black beet sugar. The clear juice remains and is then centrifuged,

that is, it is whirled about until it separates into two parts—molasses and raw beet sugar.

The raw beet sugar is then thoroughly heated, destroying every particle of organized life-celled substance in it. But even now it must be further chemically treated. It is still not sufficiently white and ghastly.

There are now added strong minerals such as acid calcium phosphate, phosphoric acid, and milk of lime.

Then, to carry away any suspended protein matter which may remain, the sugar manufacturer uses blood albumen from the slaughter-houses.

Again the manufacturer makes another purchase from the slaughter-houses, bone-black from "canning" or low-grade animals. This bone-black or animal charcoal is used as a filter to further "purify" the mixture we call sugar.

Thus far the sugar has been thoroughly heated twice. Now it must again be thoroughly boiled to separate it from the syrup. You may think that it ought to be ready for consumption now—but—not yet.

The last touch of shimmering whiteness must be added.

It is then bleached with a strong bleaching agent such as blue water. This process holds true with first grade sugar but it becomes even worse with low grade sugars.

These inferior sugars are extracted from the molasses by-products by the action of strong chemicals such as calcium and barium hydroxide. The molasses itself is used in gelatin, jams and in many baking products.

Commercial sugar is representative of the ultimate extreme in food degeneration. Merely to state that it is a starvation food is putting it mildly.

The term food is a misnomer. Sugar is the most injurious product in our national dietary with no exceptions and under every possible condition.

CHAPTER XXIII

A TASTE OF EVERYTHING

A mother who had borne nine children had very positive ideas concerning diet for children. Her conclusions tersely summed up were that she fed her children "a taste of everything."

At a very early age they knew the taste of bacon and beer, ice cream and pickles, cakes and candies, beef and fowl, cornbread and molasses. She was positive that this was the only system to habituate a child to ultimately "eat our way," as she put it.

In her reply to a question, "How many of your children did you raise?" she said:

"Well, two died of diphtheria, one of tuberculosis and one of summer complaint." She saw no relationship whatever between this dreadful mortality and her dietetic principles as embodied in "A taste of everything."

A woman boasted of the fact that her child received twenty drops of whisky with his milk under the belief that it gave him strength and stamina.

Still another feeds her child all the lean, semi-cooked beef he can consume. She states that raw beef creates raw strength. Consequently, the more meat—the more strength.

FAMILY HABITS SPEEDILY BECOME BABY'S HABITS

The current habits of infant feeding are, unfortunately, bound up with the habits of the community in which one lives. Where sorghum molasses and baking powder cornbread are in vogue, these items are incorporated in baby's dietary. Where frankfurters

and sauerkraut are incorporated, baby, likewise, receives frankfurters and sauerkraut.

The children of every community are reflections of the habits and customs of that community. In general the greater the intelligence, the less the mortality.

Thinking parents know that children cannot be fed thoughtlessly, indifferently, nor without regard to their health welfare. Babies can no more be fed "a taste of everything" than baby chicks can be fed rations that older chickens are fed.

The physical development, the muscular and nervous reactions, the digestive functions are characteristically distinct in the case of the child as contrasted to his parents. His relatively tender digestive apparatus cannot withstand the dietetic crimes committed by his elders. Rebellion is almost instantaneous. He sickens quickly under adverse circumstances.

To attempt to place baby under the same haphazard, unscientific, unthinking and utterly stupid dietetic regime, characteristic of the American dietetic habits of today, is nothing short of placing baby under tremendous handicaps which will ultimately affect his entire future life.

BABY WANTS WHAT HE SEES

Many mothers, who follow the course of least resistance, are feeding baby with the rest of the family group. Baby's high chair is generally placed in proximity to the table at which the rest of the family are dining. If, perchance, waffles, bacon, and eggs are served for breakfast, it is quite the natural thing for an indulgent parent or doting brother or sister to "Give him a taste. It won't hurt him."

It is so much easier to satisfy his clamors for whatever he sees on the table than to discipline him. Of

course he will like the taste of bacon, eggs and coffee. They taste good. Why shouldn't he!

Once having had the taste of these food flavors, baby's dietetic morality has been corrupted. It now becomes much more difficult for mother to give baby "a dose of discipline" rather than the waffles and bacon which he ought not to have. It is by these byways and deviations in baby's training that every bit of morale is shattered.

How many of us have seen children at the beach, who, everytime they passed a stand, would give forth the inevitable, "Mama, I wanna lollypop," or "Mama, I wanna ice cream cone," or "Mama, gimme a dime. I wanna buy a hot dog."

The "Gimmes" and the "Wannas" which torment mothers in the childhood days really commence in the period when baby cries for the things he sees and is given "a taste of everything."

The "taste of everything" procedure is destructive to a child's morale, inhibitory to his training, and retarding to his physical and mental development. Less of it would create a greater freedom from the devastating diseases of infancy and childhood.

Its complete eradication would, of itself, go a long way in the reduction and elimination of the diseases characteristic of this period. Baby's feeding should be carefully thought out, logically planned, and, for at least those years during which he is dependent on his parents, he should be kept rigidly on a diet that will foster health, vitality and growth.

DIETS FOR CHILDREN

FROM BIRTH TO ADOLESCENCE

CHAPTER XXIV

FOOD QUANTITIES

In the presentation of the diet menus herewith listed, I have purposely omitted mentioning quantities notwithstanding that every standard medical text-book invariably quotes specific feeding quantities for every age.

In making a closer analysis of these text-books, one will invariably find that the quantity recommended will have a range of variation of at least 50 per cent from minimum to maximum.

This, however, is not my principal objection to giving specific quantities. From extensive observation of mothers I have frequently noted that merely because a text-book or the doctor recommended that baby have a certain quantity of food, every possible means within their power is used to force this quantity of food into him. The result has invariably been overstuffing, colic, constipation, etc.

The fallacy of prescribing definite quantities for every age is self evident. Babies differ widely. Some naturally have a greater appetite than others. Again, children's appetites differ at various periods. For instance, it is unreasonable for a child to consume as large a quantity of food on a very hot day as he does on a very cold day. When a child is somewhat indisposed, the tendency will be for a lesser consumption of food.

Therefore, the entire question of quantity is very flexible and variable. It must be left to the intelligence and observation of the mother or the nurse. In a very short time mother can easily tell whether baby is satisfied with his food or not. If he dawdles and plays with his food it is usually a sign that he is no longer hungry.

However, the best rule one can make is to permit baby to consume as much as his appetite desires, provided, of course, that the food is wholesome and natural. It would be ridiculous to permit a child's appetite to govern quantities of denatured and unnatural foods. But for all other purposes natural appetite, varying with each child, as well as with the seasons, with the state of physical health, and many similar factors, must be the guides.

The menus given in the pages to follow are for one week only, except in the case of infants where the schedule remains the same every day.

Variations from these menus are permissible provided, of course, that the substitutes for each food are somewhat similar. For instance, it is permissible to substitute one leafy vegetable for another, one tuber vegetable for another, one cereal for another, and so on.

FEEDING SCHEDULE FOR THE INFANT

Diet No. 1

FROM BIRTH TO TWO WEEKS

FEEDING SCHEDULE WHEN MOTHER HAS
SUFFICIENT BREAST MILK

6 A. M.	3 P. M.
9 A. M.	6 P. M.
12 A. M.	9 P. M.

If the breasts secrete sufficiently, alternate breasts for each feeding. Otherwise baby may drain both breasts.

Distilled or boiled tepid water may be offered at all times but he should never be forced to take it.

Diet No. 2

FROM BIRTH TO TWO WEEKS

FEEDING SCHEDULE WHEN MOTHER HAS IN-
SUFFICIENT BREAST MILK

6 A. M.—Breast nursing from both breasts. Immediately following breast nursing, formula of two-thirds goat's milk diluted with one-third distilled or boiled water.

Feedings every three hours until approximately 9 P. M.

Note: If unable to secure goat's milk, use instead raw certified cow's milk.

Diet No. 3

FROM TWO WEEKS TO THREE MONTHS

FEEDING SCHEDULE WHEN MOTHER HAS
SUFFICIENT BREAST MILK

- 6 A. M. Breast nursing from one or both breasts.
 - 10 A. M. Breast nursing from one or both breasts.
 - 2 P. M. Breast nursing from one or both breasts.
 - 6 P. M. Breast nursing from one or both breasts.
 - 10 P. M. Breast and milk feeding as at 6 A. M.
- Distilled or boiled water whenever desired.

Diet No. 4

FROM TWO WEEKS TO THREE MONTHS

FEEDING SCHEDULE WHEN MOTHER HAS IN-
SUFFICIENT BREAST MILK

- 6 A. M.—Breast milk from both breasts.
Supplement with a formula of two-thirds cow's or goat's milk diluted with one-third distilled or boiled water.
- 9 A. M.—Strained orange juice, diluted half and half with water.
- 10 A. M.—Breast nursing and milk formula as at 6 A. M.
- 1 P. M.—Fig juice, made by soaking black mission figs for 12 hours with just enough water to cover.
- 2 P. M.—Breast and milk feeding as at 6 A. M.
- 5 P. M.—Prune juice, made by soaking cut up prunes for 24 hours.
- 6 P. M.—Breast and milk feeding as at 6 A. M.
- 10 P. M.—Breast and milk feeding as at 6 A. M.

Note: Fig and prune juices do not need further dilution than the soaking process through which they are put.

Diet No. 5

FROM TWO WEEKS TO THREE MONTHS

FEEDING SCHEDULE WHEN MOTHER DOES NOT
NURSE

The same general schedule as in Diet No. 4, except that a formula of two-thirds cow's or goat's milk diluted with one-third water completely substitutes for mother's breast milk.

*Diet No. 6*FROM THREE MONTHS TO PROTRUSION
OF FIRST INCISOR TEETH

The same general schedule as in Diets No. 4 and 5, except that considerably more of the pulp is allowed to remain with the fruit juices and bottle feedings should gradually change to spoon feedings, at least when the first teeth come through.

*Diet No. 7*FROM PROTRUSION OF FIRST INCISOR TO
PROTRUSION OF EIGHTH INCISOR

(Approximately 7th month to 12th month)

- 6 A. M.—Milk formula as in Diets 4 or 5.
- 9 A. M.—Orange juice with larger quantity of pulp, but same dilution.
- 10 A. M.—Milk formula.
- 1 P. M.—Fig juice same as in preceding diets but with larger quantities of pulp.
- 2 P. M.—Choice of any of the following
WHOLE grain cereals, cooked reasonably soft, total quantity to be one-half of the customary milk formula:

Whole wheat

Unpolished barley

Whole corn

Brown rice

Whole oats

These cereals are to be finely ground. They should not be flavored or sweetened, but if baby shows marked dislike, a very small quantity of pure honey may be added.

Following his cereal, for the balance of his meal, one-half usual quantity of milk formula.

5 P. M.—Prune juice, same as formulas in preceding diets.

6 P. M.—Milk formula.

Diet No. 8

FROM EIGHTH INCISOR TO FORMATION OF BALANCE OF FIRST SET OF TEETH

(Approximately 12th month to 18th month)

The same general schedule as for Diet 7, except that the fruit juices are discontinued. In their place the child may be fed any kind of fresh or dried fruit, cut up, ground, pulped or mashed. The dried fruits may be soaked in water and then pulped. None of the fruits should be stewed, baked, or have heat applied to them in any manner. Fresh fruits in season should be preferred at all times.

From this time onward baby is considered a young child and the diets that follow are intended to meet his various emergencies of life.

Of course, it must be understood that these diets cannot precisely fit every child coming under the various classifications. They are merely intended to apply to the majority of children. The exceptional child should be given special consideration, and an individual diet must be procured from the attending physician.

Diet No. 9

FOR A HEALTHY CHILD

1

- Breakfast* Whole wheat cereal ground to suit,
flavored with milk, or cream, or
honey.
Prunes.
- Mid-morning* . . Apples and raisins.
- Noon* Salad of celery, lettuce, spinach and
cucumbers. Dressing, oil, lemon
juice and honey.
Baked egg plant and unsalted but-
ter. Whole wheat bread and al-
mond butter.
- Mid-afternoon* . Oranges and dates.
- Evening* Salad of water cress, avocado, cel-
ery and walnuts. Oil and tomato
sauce dressing.
Baked potato.
Steamed spinach.
Whole wheat crackers and unsalted
butter.

2

- Breakfast* Sliced bananas and milk.
Apricots.
- Mid-morning* . . Plums and figs.
- Noon* Salad of water cress, grated beets,
grated carrots, celery and nuts.
Mayonnaise dressing.
Baked sweet potato.
Asparagus and butter.
Rye bread and butter.
- Mid-afternoon* . Avocado.

Evening Salad of lettuce, cabbage, turnips, peppers and radishes, mayonnaise dressing.

Baked yam with nut or unsalted cow butter.

Cauliflower.

Whole wheat crackers and butter.

The above two diets are illustrative of groupings and combinations. For instance, in the cereals for breakfast, one may use any whole-grain cereals besides wheat, such as brown rice, hominy, corn, oats, rye, unpolished barley. For a fruit, besides the fruits I have mentioned in these fruit samples, one may use raisins, figs, dates, dried pears, dried apricots or, in fact, any other kind of dried fruit. During the warm summer months, however, it would be most advisable to keep the normal, healthy child on a fruit breakfast.

For mid-morning, one may use every fruit in season, or if fresh fruits are out of season, then use the unsulphured, sun-dried fruits.

Note that for the noon meal there is always a dish of raw salad; not only the salads which I have recommended but also any form of salad made preferably from the following ingredients will be satisfactory:

lettuce	green onions	carrots
endives	parsnips	cucumbers
mustard greens	turnips	spinach
swiss chard	bean sprouts	celery
watercress	beets	

A baked starch in the form of baked potato, sweet potato, yam, egg plant, squash or pumpkin is also desirable for this meal. These may be flavored with honey or with a butter fat.

A cooked vegetable, preferably brussels sprouts, cauliflower, fresh wax beans, fresh lima beans, rhubarb,

peas, beans, lentils, or any of the salad vegetables listed above which can readily be cooked, will also combine favorably for the noon lunch.

To finish up, whole wheat crackers or the crackers or breadstuff made of any of the whole-grain cereals, together with nut butter or unsalted cow butter, make a well-balanced meal.

There are hundreds of combinations from these groups. There are many hundreds more of delightful, savory, tasty menus that may be prepared. It is impossible to go into full detail in this volume. Those of you who want to follow this up further will find information in full, explicit detail in my "Health Diet and Recipe Book." See advertisement in the back of this volume.

Diet No. 10

SUGGESTIONS FOR SCHOOL LUNCHES

1

Apples
Raisins

Avocado sandwiches
(whole wheat bread)

1 or 2 sticks of celery

2

Raw salad (use container that fits lunch box) mixed with cottage cheese, and dressing of lemon juice, honey and oil.

Dates and nuts.

3

Cold slaw (in container).

Nut butter sandwiches (or health jams).

Prunes.

4

Fresh fruits in season.

Figs and nuts.

5

Fruit salad (in container).

Nuts and dates or raisins and figs.

6

Tomatoes

Carrots

Celery

Raisins

Whole wheat crackers with nut butter or avocado.

7

Bananas

Raisins or dates

Apples

Nuts

Carob (St. John's bread)

*Diet No. 11*TEMPORARY DIET FOR CHILD WITH
ENLARGED TONSILS AND ADENOIDS

1

Breakfast Peaches.

Apples.

Figs.

Noon Raw vegetable salad of lettuce, to-
matoes, cucumbers and radishes.

Choice of dressing.

Spinach.

Green peas.

Wheat crackers and butter.

Evening Raw salad, finely chopped, of spin-
ach and raisins.

Plain dressing.

Vegetable soup.

Carrots.

2

Breakfast Prune juice.

Oranges.

Dates.

- Noon* Raw vegetable salad of watercress,
tender tips of asparagus, green onions and cucumbers.
Lemon juice, honey and oil dressing.
Cauliflower.
Swiss chard (steamed).
- Evening* Raw salad of shredded cabbage.
Plain dressing.
Artichoke.
Whole wheat crackers and butter.

3

- Breakfast* Grape juice.
Apples.
Figs.
- Noon* Raw salad of lettuce, tomatoes, turnips, green onions.
Plain dressing.
Celery stuffed with avocado.
Whole wheat bread and butter.
- Evening* Raw salad of grated carrots and raisins.
Plain dressing.
Spinach.
Rhubarb sauce (sweetened with honey).

4

- Breakfast* Fig juice.
Peaches.
Pineapple or watermelon.
- Noon* Raw salad of lettuce, watercress, green, onions.
Plain dressing.
Buttered beets.

Whole wheat crackers with avocado butter.

Soaked prunes.

Evening Raw salad of finely shredded red cabbage.

Plain dressing.

Steamed onions.

Ear corn.

Apple sauce (sweetened with honey).

5

Breakfast Prune juice.

Grapes.

Pears.

Noon Raw vegetable salad of lettuce, tomatoes, cucumbers, celery, onions.

Plain dressing.

Spinach.

Parsnips.

Rye-crisp.

Evening Salad of apples, raisins, nuts, celery.

Served on lettuce with mayonnaise.

Cauliflower.

Asparagus.

6

Breakfast Orange Juice.

Melon.

Raspberries.

Noon Raw salad of lettuce, celery, carrots.

Plain dressing.

Cauliflower.

Baked yam.

Evening Raw salad of finely shredded cabbage.
 Plain dressing.
 Onions (steamed or baked).
 Steamed rhubarb sauce (use raisins to sweeten).

7

Breakfast Rhubarb juice.
 Apricots.
 Raisins.

Noon Raw salad of shredded spinach, watercress and grated carrots with plain dressing or mayonnaise.
 Swiss chard (steamed).
 Wheat crackers with avocado butter.

Evening Raw salad of finely shredded cabbage and diced apples.
 Plain dressing.
 Ear corn.
 Spinach.
 Rye-crisp and butter.
 All the water patient cares to drink and fresh fruit between meals, if desired.

Diet No. 12

DIET FOR CHILD HAVING RESPIRATORY
 DISEASE ASSOCIATED WITH CONSID-
 ERABLE MUCOUS DISCHARGE

1

Breakfast Peaches.
 Watermelon.
 Figs.

- Noon* Salad of oranges, cocoanut and pineapple.
Dressing of almond butter, lemon, honey.
Dates.
- Evening* Salad of tomato stuffed with celery, cucumber, tomato pulp and avocado.
Dressing of mayonnaise.
Lima beans (steamed).

2

- Breakfast* Apricots.
Cherries.
Raspberries.
- Noon* Salad of pineapple, cantaloupe, raspberries.
Dressing of orange juice, honey and nut butter.
Celery stuffed with avocado.
Figs.
- Evening* Grated carrots and raisins.
Plain dressing or mayonnaise.
Swiss chard (steamed with olive oil).

3

- Breakfast* Nectarines or peaches.
Pomegranates.
Dates.
- Noon* Salad of lettuce, tomato and avocado.
Plain dressing.
Asparagus soup.
Whole wheat crackers and nut butter.

- Evening* Finely shredded cabbage.
Dressing of honey, lemon juice, oil
and nut cream butter.
Asparagus.
Flaxseed crackers and butter.

4

- Breakfast* Oranges.
Pears.
Apples.
- Noon* Salad of tender raw corn scraped
from cob, finely cut green onions,
minced parsley and a bit of garlic.
Plain dressing.
Buttered beets.
Spinach, mustard greens and on-
ions (steamed).
Whole wheat bread and butter.
- Evening* Salad of tomato stuffed with celery,
cabbage, onions and a touch of gar-
lic.
Mayonnaise dressing.
Green peas.

5

- Breakfast* Melons.
Seedless grapes.
Pears.
- Noon* Salad of finely chopped spinach and
raisins.
Dressing of honey, lemon juice and
oil.
Cauliflower (steamed or baked).
Asparagus (steamed).
- Evening* Raw salad of lettuce, tomato, cel-
ery, green onion.

Plain dressing.
Butter carrots (steamed).

6

- Breakfast* Pineapple.
Oranges.
Raisins.
- Noon* Salad of endive or lettuce and to-
matoes.
Plain dressing.
Corn on cob.
Apple sauce.
- Evening* Salad of apple, orange, banana,
prunes, nuts, raisins and a little
honey.

7

- Breakfast* Fruit salad of oranges, grapefruit
and avocado.
Dressing of lemon juice, honey and
oil and nut cream butter.
- Noon* Salad of watercress, bean sprouts
and tomatoes.
Plain dressing.
Baked yam.
- Evening* Fruit salad of berries, bananas, ap-
ples, dates and a little honey.
- Note:* (Finely minced garlic to be
used in the preparation of vege-
table salads.)

Diet No. 13

FOR A TUBERCULAR CHILD

1

- Breakfast* Brown rice (steamed).
Milk.
- Mid-morning* . . Oranges.

Noon Raw salad of tomatoes, watercress,
grated beet.
Dressing of lemon juice, honey and
oil.
Steamed carrots and peas.
Whole grain bread and butter.
Raw certified milk.

Mid-afternoon . Milk.

Evening Cream of celery soup.
Flaxseed crackers.
Raw salad of grated carrots and
banana sauce.
Green peas.

Before Retiring. Milk.

2

Breakfast Cracked wheat (steamed).

Mid-morning . . Apples and raisins.

Noon Raw salad of finely shredded cab-
bage, cream dressing, finely cut
sweet onion.
Steamed asparagus and baked po-
tato.

Mid-afternoon . Milk.

Evening Raw salad of finely chopped spin-
ach, cottage cheese, grated beets.
Plain dressing.
Baked egg plant.
Whole wheat crackers.

Before Retiring. Milk.

3

Breakfast Whole grain oats (steamed).
Milk.

Mid-morning . . Persimmons.

Noon Raw salad of avocado, tomatoes
and celery.

Baked squash.
Steamed spinach.

Mid-afternoon . Milk.

Evening Fruit salad mixture of grapes, banana, peaches, apricots, nuts and dates.

Before Retiring. Milk.

Note : Cut up figs, raisins, or dates may be steamed with cereals as a sweetening agent. Otherwise use a little honey.

Diet No. 14

FOR CHILD WITH ACUTE SKIN ERUPTIONS

1

Breakfast Oranges.
Berries.

Mid-morning . . Dates.

Noon Raw vegetable salad of spinach, celery and tomatoes.
Plain dressing.
Baked potato.

Mid-afternoon . Melon.

Evening Peaches.
Figs.

2

Breakfast Apples.
Grapes.

Mid-morning . . Dried figs.

Noon Raw vegetable salad of watercress, carrots and lettuce.
Plain dressing.
Steamed asparagus.

Mid-afternoon . Pears.

Evening Salad of melon, berries and carob meal.
Dates.

3

Breakfast Grapefruit.
Peaches or plums.

Mid-morning . . Dried apricots.

Noon Raw vegetable salad of grated carrots and raisins.
Plain dressing.

Mid-afternoon . Apricots.

Evening Raw cranberry sauce.
Fresh figs.
Raisins.

Diet No. 15

CONSTIPATION

1

Breakfast Cantaloupe.
Any berries in season, sweetened with a little honey.

Noon Raw salad of grated carrots and raisins.
Plain dressing.
Steamed asparagus.
Steamed spinach.
Bran muffins.

Evening Fruit salad combining 3 or 4 fresh fruits in season, sweetened with honey and garnished with grated Brazil nuts.

2

- Breakfast* Grapes.
 Apricots.
 Pears.
- Noon* Raw salad of finely shredded cabbage.
 Plain dressing.
 Buttered beets.
 Stewed figs.
- Evening* Raw salad of lettuce and dressing.
 Steamed cauliflower.
 Whole wheat toast with avocado butter.

3

- Breakfast* Strawberries.
 Seedless raisins.
 Brazil nuts.
- Noon* Raw salad of tomato, stuffed with celery and avocado.
 Plain dressing.
 Steamed onions.
 Baked squash (Hubbard or Banana).
- Evening* Raw salad of shredded red cabbage.
 Plain dressing.
 Steamed Swiss chard.
 Rye crisp and butter.

4

- Breakfast* Oranges.
 Cherries.
 Figs.
- Noon* Raw salad of finely shredded turnips, chopped spinach, tomatoes.
 Mayonnaise dressing.

Steamed green peas.
 Baked parsnips.
Evening Baked apple.
 Whole wheat crackers and sweet
 cow butter.
 Prune juice.

5

Breakfast Honey dew melon.
 Seedless grapes.
 Figs.
Noon Raw salad of finely chopped spin-
 ach and grated carrots.
 Plain dressing.
 Celery soup.
 Steamed asparagus.
 Steamed green peas.
Evening Salad of apples, celery, lettuce and
 ground nuts.
 Mayonnaise dressing.
 Whole wheat crackers and avocado
 butter.

Diet No. 16

DIET FOR A HEALTHY CHILD

1

Breakfast Fruit salad of apples bananas, ber-
 ries, melon, dates and nuts.
Noon Vegetable soup.
 Salad of lettuce, tomatoes.
 Dressing of lemon juice, honey, oil
 and nut butter.
 String beans (steamed).
 Corn on cob.
 Whole wheat bread and butter.

Evening Salad of finely chopped spinach,
celery and cottage cheese.
Dressing of honey, lemon juice and
oil.
Green peas.
Apple sauce.
Milk.

2

Breakfast Brown rice and dates (steamed).
Milk.

Noon Salad of celery, nuts and apple.
Steamed spinach and mustard
greens.
Baked vegetable loaf.
Tomato sauce.

Evening Cream of celery soup.
Salad of cottage cheese, green on-
ions, radishes.
Swiss chard (steamed).
Sweet corn on cob.

3

Breakfast Any fresh fruits in season.
Dates.
Nuts.

Noon Salad of lettuce, tomatoes, green
pepper and cucumber.
Plain dressing.
Raw celery stuffed with nut butter
and avocado.
Steamed cauliflower.
Baked vegetable dish.

Evening Salad of grated carrots and banana
sauce.
Steamed spinach.

Whole wheat crackers and butter.
Milk.

4

Breakfast Bananas mixed with nuts and raisins.

Flaxseed crackers.

Milk or cocoa.

Noon Cream of spinach soup.
Salad of lettuce, tomatoes and avocado.

Mayonnaise dressing.

Steamed carrots and peas.

Baked egg plant.

Evening Any raw vegetable salad.

Beet tops (steamed).

Baked sweet potato.

5

Breakfast Fresh salad of berries and bananas served in melon.

Figs or raisins and nuts.

Noon Salad of shredded cabbage, celery, green onions.

Cream dressing.

Steamed lima beans.

Artichoke.

Apple sauce.

Evening Grated carrots, mayonnaise dressing.

Asparagus (steamed).

Date pudding.

Milk.

6

Breakfast Fresh fruits, dates and nuts.

Noon Grated carrots and raisins, mayonnaise dressing.

Steamed asparagus.

Baked potato.

Stewed figs.

Evening Salad of lettuce, avocado and tomato.

Plain dressing.

Artichoke.

Stewed prunes.

Whole wheat crackers.

Milk.

7

Breakfast Cracked wheat and figs.

Milk.

Noon Raw combination salad with plain or mayonnaise dressing.

Buttered beets.

Vegetable stew.

Rhubarb sauce and dates.

Evening Salad of tomatoes stuffed with celery, nuts and apples.

Dressing of mayonnaise.

Green peas and new potatoes.

Baked apple.

Notes : Use any nut butter or sweet cow butter.

As confections use any unsulphured dried fruits ground up and mixed with nuts.

A half hour before breakfast serve any of the fruit juices.

Diet No. 17

PREGNANCY DIET FOR THE FIRST SIX MONTHS

1

- Breakfast* Orange juice.
Sliced peaches.
Raisins.
- Noon* Salad of cut up fine lettuce, cucum-
bers, spinach and celery.
Plain dressing of lemon juice, oil
and honey.
Baked yam.
Cauliflower.
- Evening* Vegetable soup.
Salad of watercress, tomatoes and
carrots.
Plain dressing.
Asparagus.

2

- Breakfast* Prune juice.
Berries.
Cantaloupe.
- Noon* Salad of watercress and finely
chopped green onions with carrots,
turnips and green peppers.
Plain dressing.
Baked squash.
Steamed spinach.
- Evening* Salad of lettuce, tomatoes and avo-
cado.
Mayonnaise dressing.
Steamed celery.
Fresh string beans.
Whole wheat bread and butter.

3

- Breakfast* Grape fruit.
Prunes.
Nuts.
- Noon* Salad of lettuce, grated beets, spinach, celery.
Plain dressing.
Corn on cob.
Steamed onions.
Rye-crisp and butter.
- Evening* Salad of tomatoes stuffed with chopped celery, nuts, cabbage, cucumbers and avocado.
Plain dressing.
Celery soup.
Buttered beets.

4

- Breakfast* Fig juice.
Berries.
Dates.
- Noon* Raw salad of grated carrots with raisins.
Plain dressing.
Steamed Swiss chard.
Baked potato.
- Evening* Pea soup.
Raw cabbage shredded fine and dressing.
Steamed beet tops.

5

- Breakfast* Fruit salad of any fresh fruits in season.
Nuts.

- Noon* Raw salad of bean sprouts, lettuce,
tomatoes.
Celery.
Steamed brussels sprouts.
Artichoke.
- Evening* Raw salad of carrots, spinach,
watercress (chopped fine).
Plain dressing.
Steamed cauliflower.
Celery root.

6

- Breakfast* Orange juice.
Apricots.
Plums.
- Noon* Raw salad of corn scraped from
the cob, finely chopped cabbage,
green onions and parsley.
Flavor with garlic and mayonnaise
dressing.
Baked potato.
Steamed spinach and mustard
greens.
- Evening* Raw salad of red cabbage and rais-
ins.
Plain dressing.
Steamed beet tops.
Artichoke.

7

- Breakfast* Orange juice.
Fresh pineapple.
Figs.
- Noon* Raw vegetable salad of watercress,
celery, tomatoes, turnips.
Plain dressing.
Baked egg plant and onions.

- Steamed spinach.
 Whole wheat bread and butter.
Evening Lentil soup.
 Raw vegetable salad of lettuce, red
 cabbage, cucumbers and celery.
 Plain dressing.
 Asparagus.

*Diet No. 18*DIETARY COVERING THE LAST THREE
MONTHS OF PREGNANCY

1

- Breakfast* Orange juice.
 Apricots.
 Raisins.
Noon Raw vegetable salad of finely cut
 up lettuce, cucumbers, cabbage and
 celery.
 Plain dressing.
 Spinach.
 Corn on cob.
Evening Raw vegetable salad of finely
 chopped watercress, beets, green
 peppers.
 Plain dressing.
 Vegetable soup.
 Asparagus (steamed).

2

- Breakfast* Grape fruit.
 Prunes.
 Nuts.
Noon Raw vegetable salad of lettuce, car-
 rots, cucumbers, celery and dress-
 ing.

Baked egg plant and onion.
 Brussels sprouts.
Evening Raw salad of watercress, cabbage,
 celery and tomatoes.
 Plain dressing.
 Steamed spinach and mustard
 greens.
 Green peas.

3

Breakfast Oranges.
 Apples.
 Figs.
Noon Celery soup.
 Salad of lettuce, tomatoes and avo-
 cados.
 Plain dressing.
 Artichoke.
Evening Raw salad of shredded cabbage,
 onions cut up fine, flavored with
 garlic and dressing.
 Fresh peas.
 Baked summer squash.

4

Breakfast Orange juice.
 Peaches.
 Figs.
Noon Salad of lettuce, celery, cucumbers
 and green peppers.
 Plain dressing.
 Buttered beets.
 Spinach (steamed).
Evening Raw vegetable salad of watercress,
 grated beets, green onions and
 green peppers.
 Plain dressing.

Steamed turnips.

Lima beans.

5

Breakfast Prune juice.

Peaches.

Cherries.

Noon Salad of watercress, chopped cabbage, nuts, cucumbers and celery.

Plain dressing.

Artichokes (steamed).

String beans (steamed).

Evening Finely chopped salad of spinach and raisins.

Tomato soup.

Carrots and peas (steamed).

6

Breakfast Orange juice.

Cherries.

Dates.

Noon Tomatoes stuffed with celery, nuts and avocados.

Plain dressing.

Fresh peas (steamed).

Spinach (steamed).

Evening Salad of watercress, grated beets, celery, parsley.

Plain dressing.

Beet tops.

Wax beans.

7

Breakfast Grape fruit.

Apples.

Figs.

- Noon* Raw vegetable salad of watercress,
parsley, chopped red cabbage and
nuts.
Plain dressing.
Cauliflower.
Steamed spinach and mustard
greens.
- Evening* Salad of lettuce, carrots, cabbage
and tomatoes.
Plain dressing.
Buttered beets.
Parsnips.

Diet No. 19

DIET FOR NURSING MOTHER

1

- Breakfast* Melon, berries, avocado, pignolia
nuts.
- Noon* Cream of corn soup.
Salad of celery, nuts and apples.
Mayonnaise dressing.
Spinach (steamed).
Baked potato.
Apple sauce.
- Evening* Salad of grated carrots and banana
sauce.
Wax beans (steamed).
Baked cauliflower dish.
Rhubarb sauce.

2

- Breakfast* Fresh figs.
Whole grain cereal (sweetened
with honey).
Milk.

- Noon* Cabbage slaw, cream dressing.
 Creamed carrots and peas.
 Whole wheat bread and butter.
 Stewed prunes.
- Evening* Salad of avocado, tomatoes and
 pignolia nuts.
 Plain or mayonnaise dressing.
 String beans.
 Summer squash.
 Whole wheat bread and butter.

3

- Breakfast* Apples, pears, oranges, dates and
 nuts.
- Noon* Vegetable soup.
 Salad of lettuce, tomato and avo-
 cado.
 Plain or mayonnaise dressing.
 Beet tops (steamed).
 Baked squash (Hubbard or Ba-
 nana).
- Evening* Salad of lettuce, cottage cheese,
 parsley, raisins and nuts.
 Lima beans.
 Mustard greens and spinach.
 Candied sweet potatoes.

4

- Breakfast* Bananas, oranges and finely shred-
 ded cocoanut or carob meal.
 Figs, nuts.
- Noon* Purée of split peas.
 Salad of finely chopped spinach and
 raisins.
 Dressing of lemon, honey and oil.
 Buttered beets.

Summer squash, tomatoes and onions (baked).
 Whole wheat bread and butter.
Evening Salad of lettuce, cucumber, tomatoes, celery and avocado.
 Any desired dressing.
 Cauliflower
 Nut loaf.
 Cranberry sauce (use honey to sweeten).

5

Breakfast Prune juice.
 Brown rice and dried figs (steamed together).
 Milk or cocoa.
Noon Watercress, grated beets and cottage cheese.
 Plain dressing.
 Steamed onions.
 Asparagus on whole wheat toast.
Evening Vegetable broth.
 Riced carrots.
 Vegetable loaf, tomato sauce.

6

Breakfast Salad of apples, bananas, berries, melons, dates and nuts.
Noon Cream of celery or spinach soup.
 Salad of grated carrots and raisins.
 Mayonnaise dressing.
 Egg plant and onions (steamed or baked).
 Date pudding.
Evening Salad of cream cheese mixed with green onions and radishes.
 Sour cream dressing.

Artichoke.

Creamed celery.

7

Breakfast Fig juice.

Cracked wheat and dates.

Cocoa.

Noon Salad of lettuce, green onions,
green peppers, tomato and parsley.
Dressing of honey, lemon juice, oil
and cottage cheese.

Corn on cob.

Baked vegetable loaf.

Baked apple.

Evening Cream of carrot soup.Salad of grated carrots, chopped
spinach.

Plain dressing.

Swiss chard.

Peas.

Baked potato.

Drinks: Fruit juices or milk ex-
tracted from nuts may be used at
any time between meals.

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